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The Structure of the Military Equal Opportunity Climate Survey

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ABSTRACT

The structure of the Military Equal Opportunity Climate Survey (MEOCS) was examined by multidimensional scaling, cluster analysis, and network analysis. These analyses were compared to results obtained from factor analysis. The multidimensional scaling resulted in four dimensions dealing with organizational effectiveness, equal opportunity behaviors, attitudes toward racial/gender separatism, and contrasting organizational commitment with perceived work group effectiveness and job satisfaction. The cluster analyses provided confirmation of the existing factor structure. They also included items that were excluded in the factors, divided an existing factor into two parts, and suggested a cluster that did not exist in the factor analysis. Positively worded items clustered separately from negatively worded items. Network analysis for the most part separated equal opportunity, racial attitudes, and organizational effectiveness items. Discussion is made of items for retention or removal in revising the MEOCS.

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Introduction

The study of organization climate has a relatively long history in psychology, with some tracing its development to the work of Lewin and his colleagues (Lewin, Lippitt, & White, 1939). One aspect of organizational climate is equal opportunity (EO) climate. EO climate is defined as individuals' perceptions that work opportunities will be based on ability and effort, and not on race, gender, religion or national origin (see Landis, 1990; Landis, Fisher, & Dansby, 1988). Concern about EO climate in the military led to the creation of the Defense Equal Opportunity Management Institute (DEOMI). The work of Dansby and Landis (1991; Landis, Dansby, & Faley, 1993) at DEOMI led to the development of the Military Equal Opportunity Climate Survey (MEOCS).

Researchers at the Defense Equal Opportunity Management Institute (DEOMI; Landis 1990; Landis et al., 1993) developed the MEOCS to overcome several problems found in using existing measures of discrimination in the military, such as the Racial Attitudes and Perception Survey (RAPS; Hiett & Nordlie, 1978). These measures had focused on racial relations, usually between Blacks and Whites, ignoring other ethnic and racial groups. Since the development of these measures the number of women enlisting in the military has been increasing. Thus, these measures did not examine issues of sexual discrimination and harassment. Finally, these measures focused on respondents' attitudes without examining behavioral incidents.

The EO items on the MEOCS examine the likelihood of behavioral incidents within the last 30 days. Twenty-seven items were also included from the RAPS to provide a comparison to earlier measures of discrimination. Cummings (1983) had proposed that organizations will be effective: 1) when the system is fair in distributing rewards; 2) when individuals believe that the rewards are equitable; 3) when individuals perceive that good performance will lead to rewards; and 4) when individuals believe that the organization will not artificially interfere with their ability or motivation. Because this model uses several aspects of EO climate in predicting effectiveness, (see Landis, 1990) organizational effectiveness (OE) items were included in the MEOCS.

After several phases of analysis and refinements, MEOCS currently appears to have a consistent structure, good reliability (Cronbach's α's > .70), and reasonably predictable results (e.g., women perceive more sexual harassment than men, Blacks perceive more racist/sexist behaviors than Whites; Dansby & Landis, 1991; Landis et al., 1993). Recent estimates suggest that more than 5,900 units, with more than 750,000 individuals responding, have completed the MEOCS. Other versions of the MEOCS have been adapted for units of primarily civilian employees, for those wanting a shorter version, and for small units with little racial or gender diversity.

Factor analysis of the MEOCS has been the primary way of analyzing its structure (e.g., McIntyre, 1995). While factor analysis can provide valuable insights into the

structure of an instrument, there are other methods available. Three other useful techniques are multidimensional scaling, cluster analysis, and network analysis (Truhon, 1993).

Multidimensional scaling (MDS) is a set of techniques for taking measures of similarity between elements and mapping them to points in a multidimensional space. The distances between these points correspond to the similarity between the elements. MDS programs seek to minimize the stress, or lack of fit, between the distances and similarities. However, one will typically reduce the stress by increasing the number of dimensions. Researchers have recommended plotting the stress by the number of dimensions to determine how many dimensions to represent. The point where the curve starts to bend or "elbow" is used as a cutoff point for determining the number of dimensions. It is up to the researcher to interpret the resulting dimensions (Kruskal & Wish, 1978). To date MDS has been used to examine the types of organizations that differ on EO climate (Tallarigo & Landis, 1995), but not the structure of the MEOCS.

Cluster analysis is a procedure for grouping data. Traditional hierarchical clustering programs group elements or concepts that are most closely related to each other to form a cluster. The distance between that cluster and other elements is defined as either the minimum or the average distance from an outside element to an element inside the cluster. As a result, intra-cluster distances are always smaller than inter-cluster distances (i.e., the ultrametric inequality) and all elements in a cluster are equally distant from the root of the tree. The distance between that first cluster and the remaining objects is recalculated and the procedure repeats itself until all objects are in one cluster.

Additive trees allow for inequality between elements outside a cluster and elements within a cluster by allowing the nodes to vary in length. Because of this flexibility, additive trees provide better fit to the data than traditional clustering programs, emphasize the distinctive features of the elements, and can provide a more appropriate structure to the data (Corter, 1996)[1].

Sattath & Tversky (1977) devised their ADDTREE program as a method to produce additive trees. Corter (1982) developed a program, ADDTREE/P, which improved the fit of the additive trees with a small increase in computation time. He has recently revised this algorithm further to improve computation time (GTREE; Corter, 1996, 1998). Additive trees have been used in a variety of applications, including to examine the structure of items on mental abilities tests (Beller, 1990) and diagnostic tests (Corter, 1995).

Network analysis uses graphs to model the proximity of relationships. In networks each concept is represented as a node. Nodes are connected to each other by links, with each link weighted to indicate the proximity between the nodes. Thus, two nodes may be connected by a single link or by a path, consisting of a sequence of nodes and links.

[1] Nonhierarchical clustering methods exist (e.g., EXTREE; Corter & Tversky, 1986) but were not used in this study.

Among the approaches to network analysis have been Pathfinder (Cooke, Durso, & Schvaneveldt, 1986), NETSCAL (Hutchinson, 1989) and MAPNET (Klauer, 1989; Klauer & Carroll, 1989). Pathfinder networks seek to minimize the distance between nodes with two parameters, q and r. The parameter q is the maximum number of links between nodes; the parameter r determines the weights between the nodes in the network (Dearholt & Schvaneveldt, 1990).

Which of these methods is best? MDS can use various measures of similarity, including correlations (Kruskal & Wish, 1978). However, Jacoby (1991) has argued that factor analysis works better with correlations, while MDS works better with observations that are interpreted as similarity data (e.g., similarity judgments, physical distances, probabilities).[2]

When comparing tree and MDS procedures, research suggests that the solutions offered by both are sometimes compatible (Critchley & Heiser, 1988), although not always (Sattath & Tversky, 1977). Some researchers (e.g., Winsberg & Carroll, 1989) have suggested a compromise between the two methods.

Corter (1996) suggests two criteria for choosing the best method: interpretability and fit. Both these criteria have problems. The more interpretable solution is preferable because it explains the data or provides more insights into further research. The problem is that there are no objective criteria for judging interpretability. Fit examines the relationship between the original data and the representation. One problem is tree models use R^2, while MDS usually uses stress (although a common measure can be found). Second, one can always increase the fit in MDS by adding another dimension. Because of these criteria, it is difficult to predict ahead of time whether tree or MDS models will be better.

When comparing network and MDS procedures, network procedures have been found to model judgments (Cooke, 1990) and memory processes better (Cooke et al., 1986), although not always (Branaghan, 1990). Durso and Coggins (1990) suggest that networks can provide information, such as providing distinctions between time-length and between basic-level and superordinate-level categories that are not available from MDS.

Method

Database

There were 715,245 cases in the MEOCS database at the time of this analyses. In terms of military service: approximately 47 percent were in the Army, 16 percent in the Navy, 15 percent in the Air Force, 12 percent in the Marine Corps, 7 percent in the Federal Civil Service, and 3 percent in the Coast Guard. Active-duty military

[2] Jacoby (1991) presents an example where MDS does a poor job representing correlational data (see his Figure 5.20 [p. 65]). He concludes that therefore correlations should not be used as input data for MDS.

organizations comprised 79 percent of the sample, reserve organizations 10 percent, National Guard organizations 10 percent, and civilian organizations 1 percent.

In terms of demographic information, the vast majority of respondents (81 percent) were male. More than half of the respondents (57 percent) were white, 18 percent African American, 8 percent Hispanic, 5 percent Asian American, 3 percent Native American, and 9 percent other or unknown. Education level was high with 28 percent possessing a high school diploma or less, 42 percent some college, 18 percent a college degree, and 12 percent graduate work. Respondents were relatively young: 5 percent younger than age 20, 30 percent age 20 to 25, 19 percent age 26 to 30, 27 percent age 31 to 40, 13 percent age 41 to 50, and 5 percent older than age 51.

The MEOCS

The current standard MEOCS consists of 124 items: 50 items dealing with EO behaviors (Landis et al., 1988), 23 items dealing with organizational effectiveness (OE; Short, 1985), 27 items from the modified RAPS (Hiett & Nordlie, 1978), and 24 items dealing with demographic background, personal experience with discrimination and overall ratings of EO climate. The 50 items dealing with EO behaviors form five groups: 1) Sexual Harassment and Discrimination; 2) Differential Command Behavior toward Minorities; 3) Positive Equal Opportunity Behaviors; 4) Racist/Sexist Behaviors; and 5) Reverse Discrimination (Landis et al., 1988). The 23 OE items form three groups: 1) Organizational Commitment (COM; Mowday, Steers, & Porter, 1979); 2) Perceived Work Group Effectiveness (EFF; Short, 1985); and 3) Job Satisfaction (SAT; Short, 1985). The 27 items from the RAPS form three groups: 1) Discrimination against Minorities and Women; 2) Reverse Discrimination; and 3) Attitudes toward Racial/Gender Separatism (Landis, 1990).

The first 100 items (i.e., all but those dealing with demographic background; see Appendix A) were used in the following analyses.

Results

Correlational Analyses

The following items (MEOCS 1, MEOCS 2, MEOCS 5, MEOCS 7, MEOCS 14, MEOCS 19, MEOCS 29, MEOCS 31, MEOCS 35, MEOCS 37, MEOCS 50, COM 51, COM 52, COM 53, COM 56, COM 58, COM 61, EFF 63, EFF 64, EFF 65, EFF 66, EFF 67, SAT 68, SAT 69, SAT 70, SAT 71, SAT 72, SAT 73, RAPS 78, RAPS 79, RAPS 83, RAPS 95, and RAPS 97) are stated in positive terms (i.e., equal opportunity) and were reverse coded for these analyses. These 100 items from the MEOCS were then correlated. The lower half of the correlation matrix with the diagonals absent is presented in Appendix B.

Multidimensional Scaling

Because the MDS program from the Statistical Package for the Social Sciences (SPSS) analyzes the data in terms of dissimilarities, the correlations were converted to distances by subtracting each correlation from 1. Thus, a perfect positive correlation (such as between an item and itself) would be given a distance of 0; negative correlations would be converted to distance greater than 1.

This dissimilarity matrix was analyzed using the MDS procedure in the SPSS program. Models with two to five dimensions were analyzed, with four proving the most interpretable. (Stress for two dimensions = .32288; for three dimensions = .25017; for four dimensions = .19249; and for five dimensions = .16671.) The coordinates for the four-dimensional solution are presented in Table 1.

The first dimension is fairly general dealing with OE, with almost all the items dealing with Commitment, Perceived Work Group Effectiveness, and Job Satisfaction included. The second dimension is strongly weighted by those EO items that deal with Positive Equal Opportunity Behaviors and RAPS items dealing with Discrimination toward Minorities and Women. The third dimension is strongly weighted by RAPS items, especially those dealing with Attitudes toward Racial/Gender Separatism. The fourth dimension contrasts Commitment with Perceived Work Group Effectiveness and Job Satisfaction.

Table 1

Coordinates for Four-Dimensional MDS Solution for MEOCS Data

Item #	Dimension 1	Dimension 2	Dimension 3	Dimension 4
MEOCS 1	1.5944	1.6065	-.0894	-.2236
MEOCS 2	.6595	1.5836	-.0529	-1.2619

MEOCS 3	-1.6255	-.1599	-.8701	-.0320
MEOCS 4	-.9161	-1.4959	.9155	-.7384
MEOCS 5	1.3829	1.7476	.1582	-.2885
MEOCS 6	-1.1989	.6265	-.5738	.0066
MEOCS 7	1.3036	1.8175	.6761	-.2797
MEOCS 8	-1.3831	.3570	.2772	-1.1014
MEOCS 9	-1.2455	.2725	-.4879	-.1872
MEOCS 10	-1.0481	.8898	-.3764	-.3590
MEOCS 11	-1.0467	-.7992	.3145	-.6900
MEOCS 12	-1.3209	-.3676	-.1660	-.1851
MEOCS 13	-1.1826	.1724	-8694	-.8684
MEOCS 14	1.6796	1.6883	.6703	.5186
MEOCS 15	-1.4637	-.9720	-.3071	-.5585
MEOCS 16	-1.3740	.2422	.0934	-.6215
MEOCS 17	-1.0148	-1.5045	.2337	-.4937
MEOCS 18	-.6188	1.0860	-.7480	-.1594
MEOCS 19	1.4318	1.5231	.5177	-.8017
MEOCS 20	-1.4317	-.2295	-.1994	-.0358
MEOCS 21	-1.3010	-1.4444	-.2581	-.0151
MEOCS 22	-1.1352	-1.1773	.0673	-.5177
MEOCS 23	-1.2984	.3046	-.4844	.2718
MEOCS 24	-1.4450	-.8097	-.9454	-.2852
MEOCS 25	-1.2989	.2364	-.0594	.0807
MEOCS 26	-1.4958	-.5713	.2207	1.3655
MEOCS 27	-1.0214	-1.9121	-.9390	-.5769
MEOCS 28	-.2598	1.4939	.4451	-.3299
MEOCS 29	1.3823	1.5212	.7360	-.1244
MEOCS 30	-1.0488	.5469	-.1668	-.3397
MEOCS 31	2.4085	1.4516	1.2392	-.1360
MEOCS 32	-1.7374	-.4194	-.6549	.1916
MEOCS 33	-1.1952	-.4694	.4263	-.4434
MEOCS 34	-1.0373	.5734	-.2647	.0137
MEOCS 35	1.3659	1.5617	.6436	-.3695
MEOCS 36	-1.4766	-.5651	-.5809	.5019
MEOCS 37	1.1605	1.6692	.1026	-.1196
MEOCS 38	-1.0142	.7908	-.4523	.0050
MEOCS 39	-1.5224	.1346	-.4830	.0220
MEOCS 40	-1.0918	-.0990	-.3858	.3663
MEOCS 41	-1.5278	.1625	-.1700	-.3058
MEOCS 42	-1.2096	-.1713	-.4483	.3861
MEOCS 43	-1.5148	.1573	-.3249	-.0553
MEOCS 44	-.7797	.7892	-.5544	.1242
MEOCS 45	-1.3563	-.9218	.1398	.0409
MEOCS 46	-1.4087	-.1062	-.2756	.0357
MEOCS 47	-1.5016	-.2359	-.0298	.0021

MEOCS 48	-1.3662	.1382	-.2660	.0570
MEOCS 49	-1.5272	-.5130	-.2749	.3415
MEOCS 50	1.4750	1.5932	.8087	-.0370
COM 51	1.9661	-.7685	-1.4895	1.2741
COM 52	1.4546	-.3320	-.9920	.3504
COM 53	1.3751	-.2671	-.8355	-.0783
COM 54	.4068	-.9603	.6251	3.4352
COM 55	1.0126	-.6590	-.6638	1.3981
COM 56	1.5624	-.7475	-1.0136	.2920
COM 57	1.0127	-1.1078	-.2823	2.2706
COM 58	1.6217	-.5378	-1.0341	.1996
COM 59	1.1537	-1.0365	-.6012	1.7746
COM 60	.6943	-.7575	-.5421	1.8908
COM 61	1.7646	-.7905	-1.2177	.5750
COM 62	1.0618	-.5359	-.7206	.9437
EFF 63	1.3545	-.4055	-.6834	-1.6714
EFF 64	1.3042	-.2545	-.6029	-1.5196
EFF 65	1.2560	-.0517	-.6215	-1.3422
EFF 66	1.4772	-.5839	-1.0739	-.8818
EFF 67	1.3653	-.2258	-.7092	-1.4621
SAT 68	1.5733	-.7340	-.5523	-.9553
SAT 69	1.6647	-.8422	-.5308	-1.3510
SAT 70	1.8125	-.6452	-.4822	-1.1206
SAT 71	1.7713	-1.0525	-.9814	-.6342
SAT 72	1.8199	-.9860	-.9182	-.2923
SAT 73	1.5778	-.6208	-.9082	-.1540
RAPS 74	.1590	-.6645	2.5176	-.1839
RAPS 75	-.4923	1.6489	-.2065	.5382
RAPS 76	-.5405	1.2129	-.0790	.6250
RAPS 77	-.4591	1.4566	-.0783	.3366
RAPS 78	2.2576	-1.2977	.9385	-1.5152
RAPS 79	1.2313	.2579	-.9458	.2603
RAPS 80	-.1522	.4881	1.6200	-.4186
RAPS 81	-.7618	.8168	.1140	.8115
RAPS 82	-.1523	-.3574	1.7547	.0328
RAPS 83	2.3455	-.3840	.0195	.5012
RAPS 84	-.6762	1.6949	-.3306	.8634
RAPS 85	-.7211	1.1847	.0033	.7720
RAPS 86	-.7278	1.1630	-.1352	.6961
RAPS 87	-.2842	.3765	1.2721	-.3672
RAPS 88	-.3160	.4641	1.3302	-.3664
RAPS 89	-.7933	1.1675	.0260	.9041
RAPS 90	-.4658	1.3791	-.1313	.4727
RAPS 91	-.4949	-1.8144	1.5731	.7107
RAPS 92	-.2733	-.2703	1.6233	-.2218

RAPS 93	-.4228	-2.5495	1.5139	.6752
RAPS 94	-.1618	-.1974	2.0940	.0505
RAPS 95	1.5147	1.4382	-.7937	-.2275
RAPS 96	-.2241	-1.4245	1.5823	.1051
RAPS 97	2.3008	-.9816	1.8629	-1.9461
RAPS 98	-.2724	.3842	.3033	.7425
RAPS 99	-.5833	-.5284	2.0438	.9820
RAPS 100	-.2998	-1.5520	1.4125	.4410

Cluster Analysis

The correlations shown in Appendix B were used in all cluster analyses. Both the ADDTREE (Corter, 1982) and the GTREE (Corter, 1998) programs put a limit of 80 variables for analysis. Since there are 100 items from the MEOCS being analyzed, it was necessary to divide these items into groups. Initially, it was decided to combine the EO and RAPS items for one cluster analysis, and the COM, EFF, and SAT items for another cluster. However, the clustering of the EO and RAPS items was not particularly interesting. So, three cluster analyses, one for the EO items, one for the RAPS items, and one for the COM, EFF, and SAT items were performed. The results of those analyses using GTREE (Corter, 1998) are discussed below.

Clustering Equal Opportunity Items

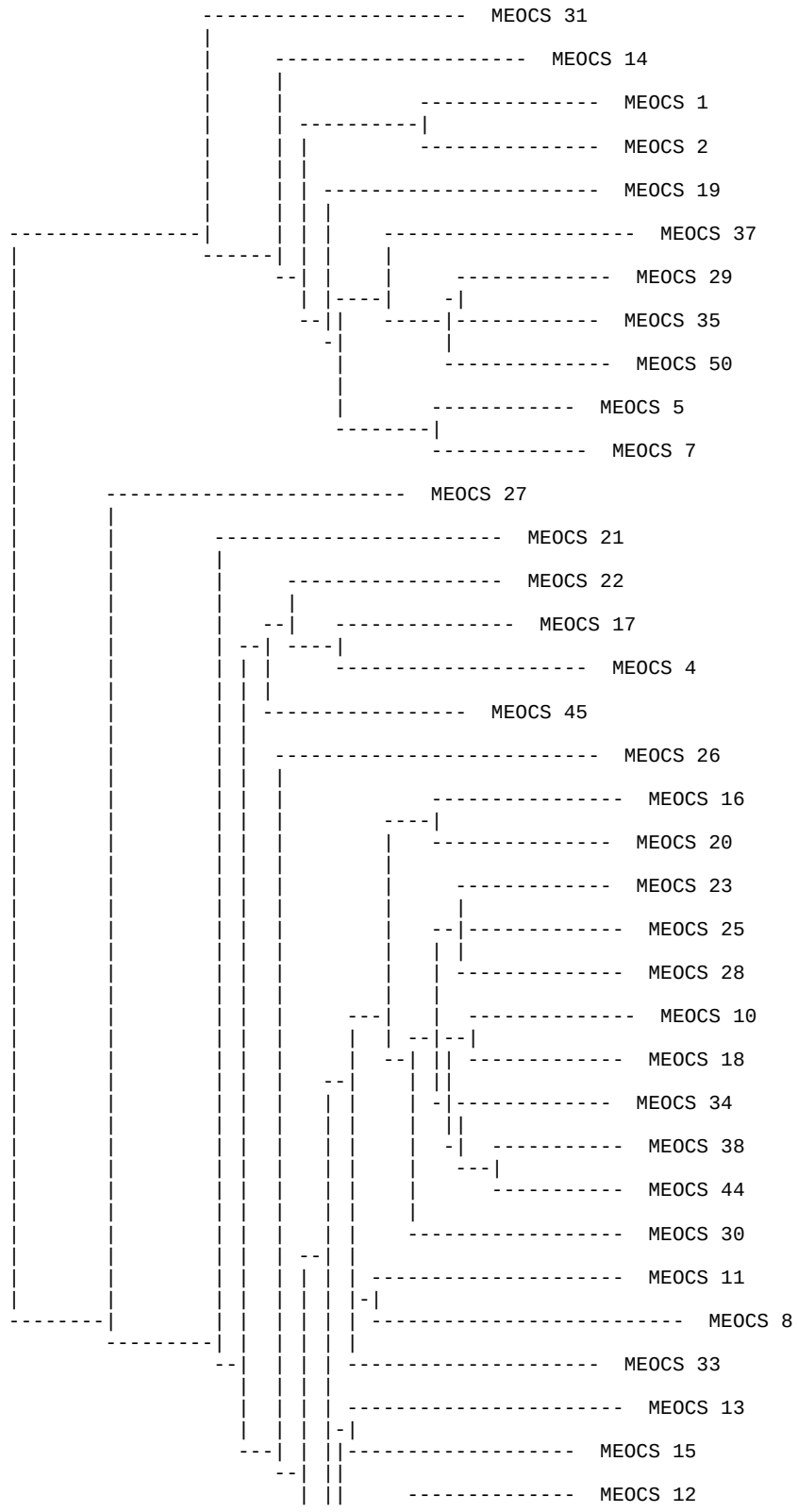
The clustering of the EO items is shown in Figure 1. The stress was .0511 (R^2= .9665), indicating good fit between the original data and the resulting tree.

Examination of the tree reveals five clusters: 1) a cluster of Sexual Harassment and Discrimination items (MEOCS 39, MEOCS 41, MEOCS 43, MEOCS 46, MEOCS 47, MEOCS 48, and MEOCS 49); 2) a cluster of items dealing with Differential Command Behavior toward Minorities (MEOCS 10, MEOCS 16, MEOCS 18, MEOCS 20, MEOCS 23, MEOCS 25, MEOCS 28, MEOCS 30, MEOCS 34, MEOCS 38, and MEOCS 44); 3) a cluster of Positive Equal Opportunity Behaviors items (MEOCS 1, MEOCS 2, MEOCS 5, MEOCS 7, MEOCS 14, MEOCS 19, MEOCS 29, MEOCS 31, MEOCS 35, MEOCS 37, and MEOCS 50); 4) a cluster of items dealing with Racist/Sexist Behaviors (MEOCS 3, MEOCS 6, MEOCS 9, MEOCS 12, MEOCS 13, MEOCS 15, MEOCS 24, MEOCS 32, MEOCS 36, MEOCS 40, and MEOCS 42); and 5) a cluster of Reverse Discrimination items (MEOCS 4, MEOCS 8, MEOCS 11, MEOCS 17, MEOCS 21, MEOCS 22, MEOCS 26, MEOCS 27, MEOCS 33, and MEOCS 45).

Landis et al. (1988) reported five factors when they factor analyzed EO items. A comparison of the factors and clusters is seen in Table 2. The internal consistency (Cronbach's alpha) of each factor and cluster is included.

Figure 1

Additive Tree of the EO Items from the MEOCS



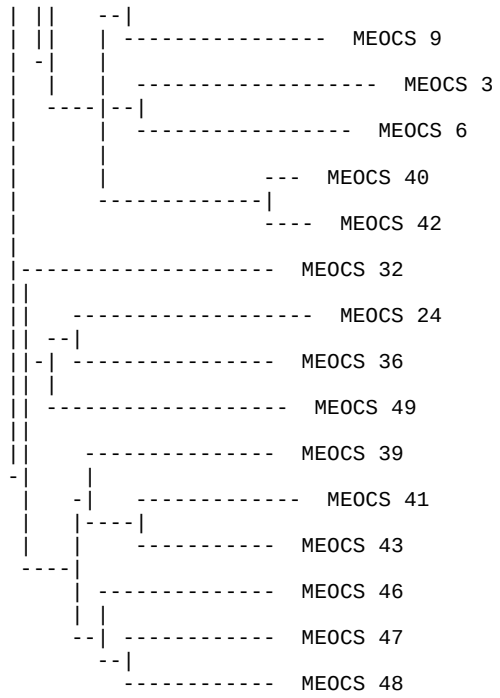


Table 2

A Comparison of the Factors and Clusters of the EO Items from the MEOCS

Factor 1 (Sexual Harassment and Discrimination)	Factor 2 (Differential Command Behavior toward Minorities)	Factor 3 (Positive Equal Opportunity Behaviors)	Factor 4 (Racist/Sexist Behaviors)	Factor 5 (Reverse Discrimination)
(α= .8946)	(α= .9041)	(α= .8418)	(α= .8735)	(α= .7691)
MEOCS 32	MEOCS 10	MEOCS 1	MEOCS 3	MEOCS 4
MEOCS 36	MEOCS 16	MEOCS 2	MEOCS 6	MEOCS 11
MEOCS 39	MEOCS 18	MEOCS 5	MEOCS 9	MEOCS 17
MEOCS 41	MEOCS 23	MEOCS 7	MEOCS 12	MEOCS 21
MEOCS 43	MEOCS 25	MEOCS 14	MEOCS 13	MEOCS 22
MEOCS 45	MEOCS 28	MEOCS 19	MEOCS 15	MEOCS 27
MEOCS 46	MEOCS 30	MEOCS 29	MEOCS 20	MEOCS 33
MEOCS 47	MEOCS 34	MEOCS 31	MEOCS 24	
MEOCS 48	MEOCS 38	MEOCS 35	MEOCS 40	
MEOCS 49	MEOCS 44	MEOCS 37	MEOCS 42	
Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5
(α= .8727)	(α= .9085)	(α= .8591)	(α = .8791)	(α= .8135)

MEOCS 39	MEOCS 10	MEOCS 1	MEOCS 3	MEOCS 4
MEOCS 41	MEOCS 16	MEOCS 2	MEOCS 6	MEOCS 8
MEOCS 43	MEOCS 18	MEOCS 5	MEOCS 9	MEOCS 11
MEOCS 46	MEOCS 20	MEOCS 7	MEOCS 12	MEOCS 17
MEOCS 47	MEOCS 23	MEOCS 14	MEOCS 13	MEOCS 21
MEOCS 48	MEOCS 25	MEOCS 19	MEOCS 15	MEOCS 22
MEOCS 49	MEOCS 28	MEOCS 29	MEOCS 24	MEOCS 26
	MEOCS 30	MEOCS 31	MEOCS 32	MEOCS 27
	MEOCS 34	MEOCS 35	MEOCS 36	MEOCS 33
	MEOCS 38	MEOCS 37	MEOCS 40	MEOCS 45
	MEOCS 44	MEOCS 50	MEOCS 42	

As can be seen, the clusters and factors are fairly similar. Cluster 1 is like Factor 1, except MEOCS 32, MEOCS 36, and MEOCS 45 have been removed. Its reliability has decreased slightly. Cluster 2 is like Factor 2 with the addition of MEOCS 20 with a slight increase in reliability. MEOCS 50 has been added to Factor 3 to produce Cluster 3 with an increase in reliability. Two items (MEOCS 32 and MEOCS 36) have been added to and one (MEOCS 20) has been subtracted from Factor 4 producing Cluster 4 with a slight increase in reliability. Three items (MEOCS 8, MEOCS 26, and MEOCS 45) have been added to Factor 5 to produce Cluster 5 with a proportional increase in reliability.

The clusters seem to be an improvement over the factors in two ways. Some items are part of clusters where they make better sense. For example, MEOCS 45 ("A better qualified man was not picked for a good additional duty assignment because the Commander/CO said it would look better for equal opportunity to have a woman take this duty.") appears to be more of a reverse discrimination item than a sexual harassment and discrimination item. Second, the clusters allow certain items that do not appear in any factors (MEOCS 8, MEOCS 26, and MEOCS 50) to be included and contribute to the scales.

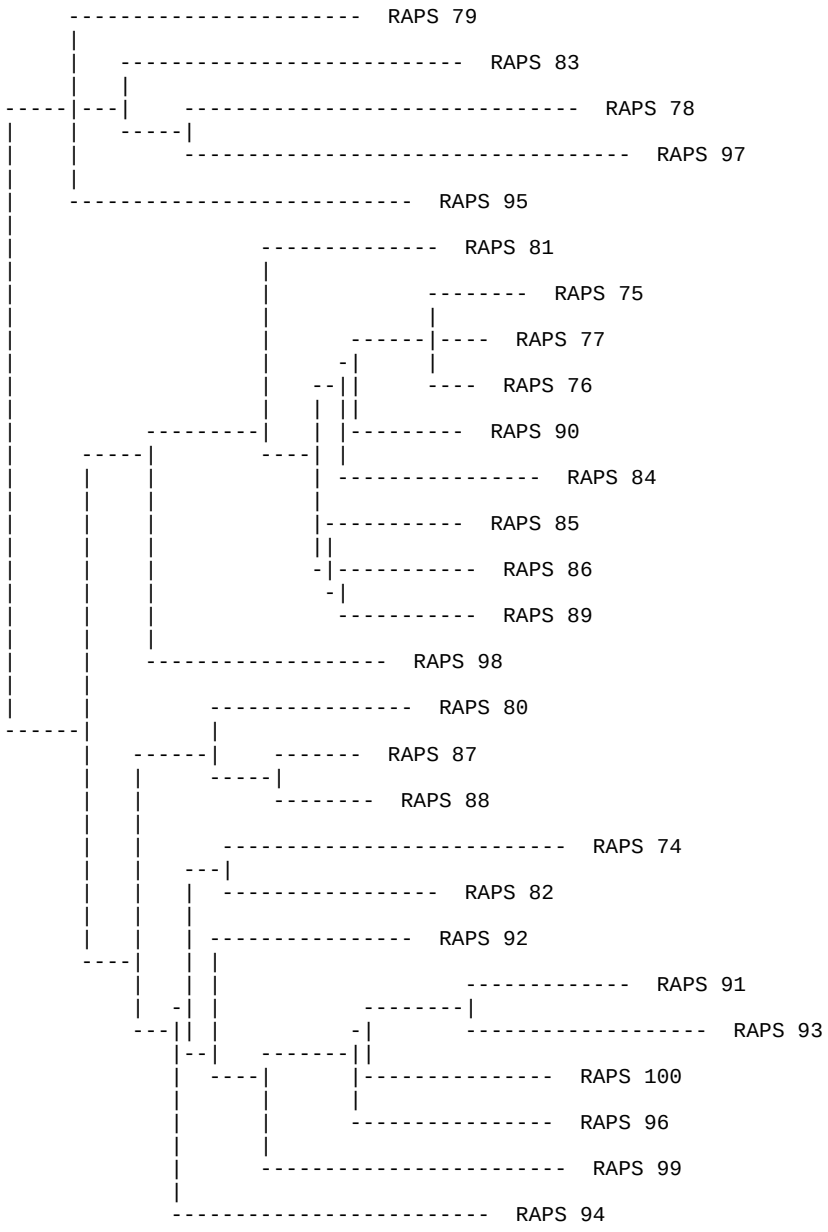
Clustering of Racial Attitudes Items

The clustering of the RAPS items is shown in Figure 2. The stress was .0782 (R^2= .9059), indicating good fit between the original data and the resulting tree.

Examination of the tree suggests three or four clusters: 1) a cluster of items dealing with Discrimination against Minorities and Women (RAPS 75, RAPS 76, RAPS 77, RAPS 81, RAPS 84, RAPS 85, RAPS 86, RAPS 89, RAPS 90, and RAPS 98); 2) a cluster of items dealing with Reverse Discrimination (RAPS 91, RAPS 93, RAPS 94, RAPS 96, RAPS 99, and RAPS 100); 3) a cluster of items dealing with Attitudes toward Racial/Gender Separatism (RAPS 74, RAPS 80, RAPS 82, RAPS 87, RAPS 88, and RAPS 92); and 4) a cluster of items dealing with a positive racial climate (RAPS 78, RAPS 79, RAPS 83, RAPS 95, and RAPS 97). It also seems possible to combine the second and third clusters into a larger cluster.

Figure 2

Additive Tree of the RAPS Items from the MEOCS



Landis (1990) identified three factors when the RAPS items were subjected to factor analysis. A comparison of the factors and clusters is seen in Table 3. The internal consistency (Cronbach's alpha) of each factor and cluster is included.

There is much similarity between the factors and the clusters. Cluster 1 consists of items from Factor 1 and RAPS 85 and RAPS 98. While RAPS 85 improves the internal consistency of the cluster, RAPS 98 decreases it (for Cluster 1 without RAPS 98 α=

.9069). Cluster 2 consists of items from Factor 2 and RAPS 94 and RAPS 99. While RAPS 99 improves the internal consistency of the cluster, RAPS 94 decreases it (for Cluster 2 without RAPS 94 α= .7565). Cluster 3 consists of items from Factor 3 and RAPS 74. Cluster 4 has much lower internal consistency and is made up of items dealing with positive racial climate.

Table 3

A Comparison of the Factors and Clusters of the RAPS Items from the MEOCS

Factor 1 (Discrimination Against Minorities and Women)	Factor 2 (Reverse Discrimination)	Factor 3 Attitudes Toward Racial/ Gender Separatism
(α= .8947)	(α= .7517)	(α= .8164)
RAPS 75	RAPS 91	RAPS 80
RAPS 76	RAPS 93	RAPS 82
RAPS 77	RAPS 96	RAPS 87
RAPS 81	RAPS 100	RAPS 88
RAPS 84		RAPS 92
RAPS 86		
RAPS 89		
RAPS 90		

Cluster 1	Cluster 2	Cluster 3	Cluster 4
(α= .9042)	(α= .7532)	(α= .8105)	(α= .5722)
RAPS 75	RAPS 91	RAPS 74	RAPS 78
RAPS 76	RAPS 93	RAPS 80	RAPS 79
RAPS 77	RAPS 94	RAPS 82	RAPS 83
RAPS 81	RAPS 96	RAPS 87	RAPS 95
RAPS 84	RAPS 99	RAPS 88	RAPS 97
RAPS 85	RAPS 100	RAPS 92	
RAPS 86			
RAPS 89			
RAPS 90			
RAPS 98			

From an examination of Figure 2 it seemed possible to combine Clusters 2 and 3 into larger clusters. As a result, a reliability analysis was conducted with all the items from

those two clusters. In this larger cluster α= .8454, with all items improving the internal consistency.

Clustering Commitment, Effectiveness, and Satisfaction Items

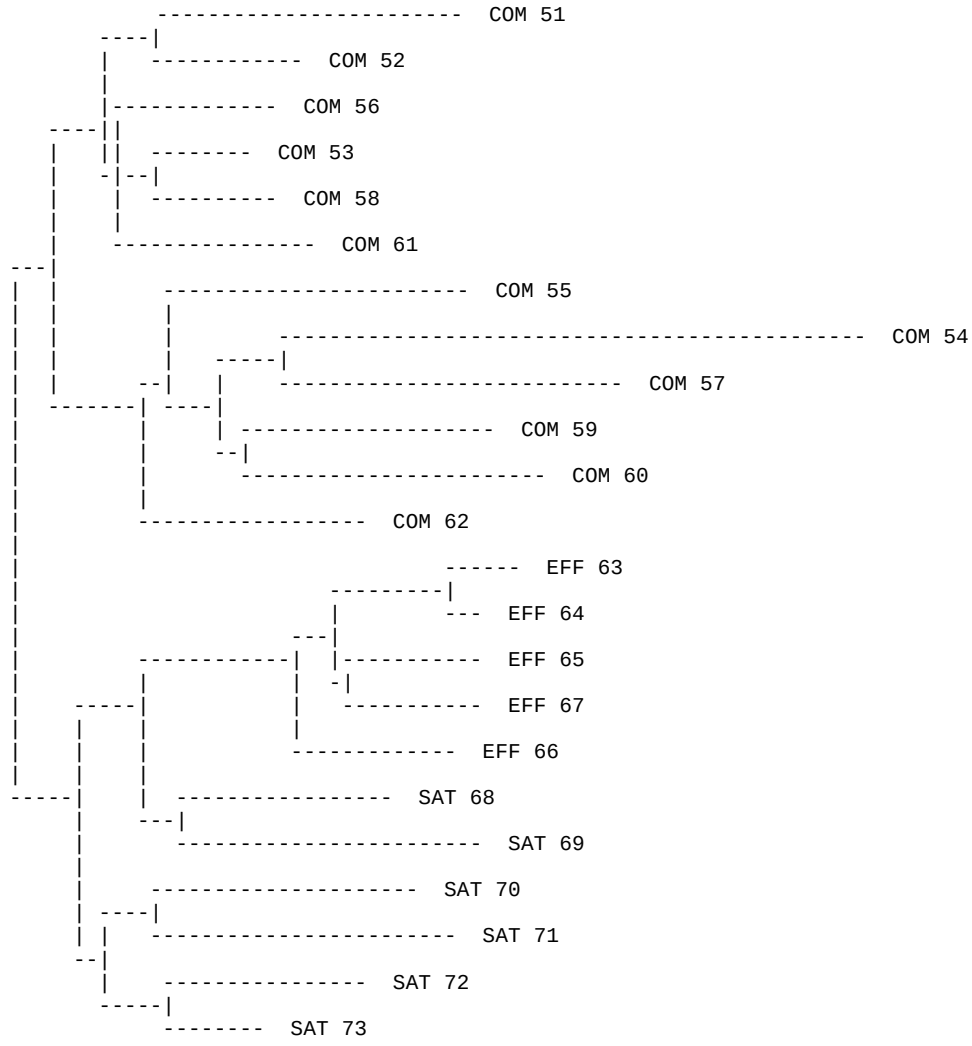
The clustering of the COM, EFF, and SAT items is shown in Figure 3. The stress was .0449 (R^2= .9615), indicating good fit between the original data and the resulting tree.

Examination of the tree suggests four clusters: 1) a cluster of items dealing with a positive commitment to the organization (COM 51, COM 52, COM 53, COM 56, COM 58, and COM 61); 2) a cluster of items dealing with a lack of commitment to the organization (COM 54, COM 55, COM 57, COM 59, COM 60, and COM 62); 3) a cluster of items dealing with Perceived Work Group Effectiveness (EFF 63, EFF 64, EFF 65, EFF 66, EFF 67, SAT 68, and SAT 69); and 4) a cluster of items dealing with Job Satisfaction (SAT 70, SAT 71, SAT 72, and SAT 73).

Three factors, one of Commitment items, one of Perceived Work Group Effectiveness items, and one of Job Satisfaction items, are usually found when these items are examined using factor analysis. A comparison of the factors and clusters is seen in Table 4. The internal consistency (Cronbach's alpha) of each factor and cluster is included.

Factor 1 is divided into two clusters with Cluster 1 consisting of items dealing with positive statements concerning organizational commitment and Cluster 2 dealing with negative statements. Cluster 3 is similar to Factor 2 except two Job Satisfaction items have added (SAT 68 and SAT 69). Cluster 4 is the same as Factor 3 except for the removal of those Job Satisfaction items.

Figure 3
Additive Tree of the COM, EFF, and SAT Items from the MEOCS



Separating Factor 1 into two clusters improves internal consistency. Cronbach's alpha for Cluster 1 is higher than Factor 1, even though Factor 1 has more items. Moving the two job satisfaction items works to decrease internal consistency. Cronbach's alpha for Cluster 3 is lower than Factor 2; likewise for Cluster 4 and Factor 3.

Table 4

A Comparison of the Factors and Clusters of the COM, EFF, and SAT Items from the MEOCS

Factor 1 (Commitment)	Factor 2 (Perceived Work Group Effectiveness)	Factor 3 (Job Satisfaction)
(α= .8614)	(α= .8731)	(α= .8032)
COM 51	EFF 63	SAT 68
COM 52	EFF 64	SAT 69
COM 53	EFF 65	SAT 70
COM 54	EFF 66	SAT 71
COM 55	EFF 67	SAT 72
COM 56		SAT 73
COM 57		
COM 58		
COM 59		
COM 60		
COM 61		
COM 62		

Cluster 1 (α= .8669)	Cluster 2 (α= .7074)	Cluster 3 (α= .8583)	Cluster 4 (α= .7627)
COM 51	COM 54	EFF 63	SAT 70
COM 52	COM 55	EFF 64	SAT 71
COM 53	COM 57	EFF 65	SAT 72
COM 56	COM 59	EFF 66	SAT 73
COM 58	COM 60	EFF 67	
COM 61	COM 62	SAT 68	
		SAT 69	

Network Analysis

The correlation matrix used in the additive tree analysis was used in the network analysis. The structure derived from the Pathfinder analysis is shown in Figure 4. The fit between the similarity matrix and the network was rather low (r = .244; if logarithms are used, r = .338), although its coherence (a measure of internal consistency) is high (.850). Attempts were made to increase the fit by increasing the number of links (i.e., changing the parameter q), but the resulting networks were slightly lower in fit. There are several

ways of examining the Pathfinder structure. The figure branches off into five areas from MEOCS 44 ("A supervisor gave a minority subordinate a severe punishment for a minor infraction. A majority member who committed the same offense was given a less severe penalty.") and RAPS 90 ("Majority members get away with breaking rules that result in punishment for minorities."): 1) a branch to the right consisting mostly of Commitment, Perceived Work Group Effectiveness, and Job Satisfaction items; 2) a branch above consisting of RAPS items dealing with Discrimination against Minorities and Women and EO items dealing with Positive Equal Opportunity Behaviors; 3) a branch below consisting of RAPS items dealing with Reverse Discrimination and Attitudes toward Racial/Gender Separatism; 4) a branch to the upper left consisting of EO items dealing with Sexual Harassment and Discrimination, and Reverse Discrimination; and 5) a branch to the lower left consisting of EO items dealing with Differential Command Behavior toward Minorities and Racist/Sexist Behaviors.

Another way of examining the structure is to examine the number of links to items in the MEOCS. Items with few links could be viewed as more peripheral to the survey, while those with many links viewed as more central to the survey (see Table 5).

Figure 4

Pathfinder Network of MEOCS Items

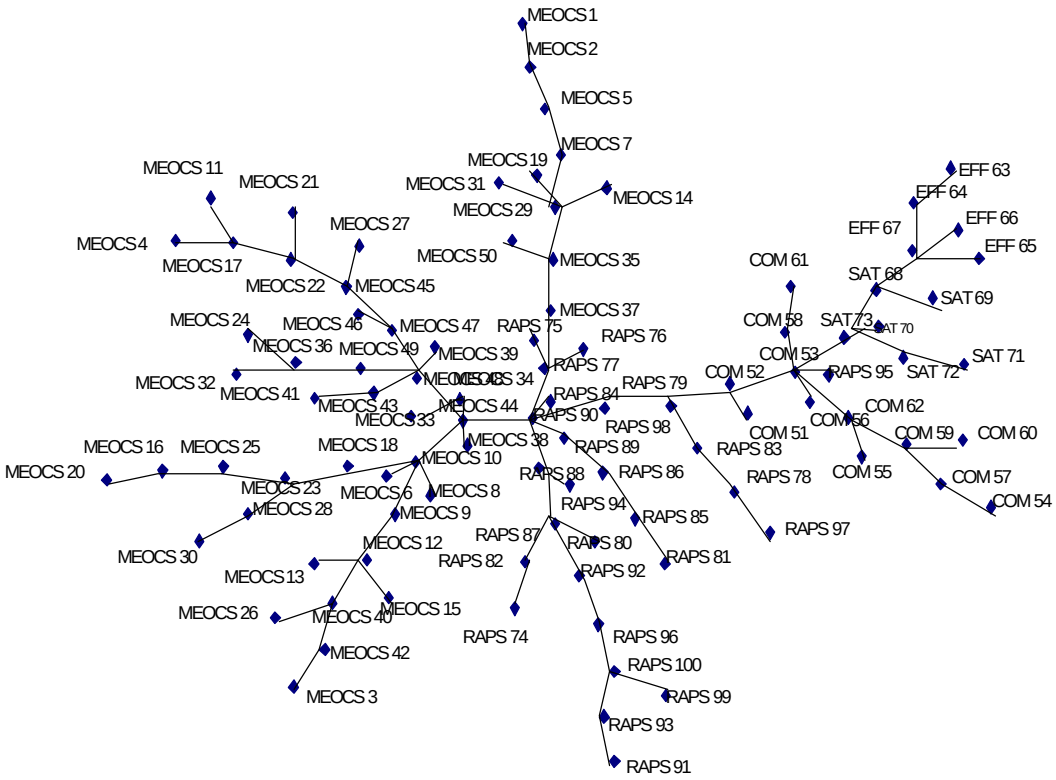


Table 5

Number of Links to MEOCS Items in Pathfinder Network

	1 Link	2 Links	3 Links	4 Links	5+ Links
MEOCS 1	COM 51	MEOCS 2	MEOCS 17	MEOCS 12	MEOCS 10
MEOCS 3	COM 54	MEOCS 5	MEOCS 22	EFF 67	MEOCS 29
MEOCS 4	COM 55	MEOCS 7	MEOCS 23	SAT 73	MEOCS 44
MEOCS 6	COM 56	MEOCS 9	MEOCS 35	RAPS 77	MEOCS 48
MEOCS 8	COM 60	MEOCS 16	MEOCS 36	RAPS 87	COM 53 (6)
MEOCS 11	COM 61	MEOCS 18	MEOCS 40		RAPS 90
MEOCS 13	EFF 63	MEOCS 25	MEOCS 45		
MEOCS 14	EFF 65	MEOCS 28	MEOCS 47		
MEOCS 15	EFF 66	MEOCS 34	COM 52		
MEOCS 19	SAT 69	MEOCS 37	COM 59		
MEOCS 20	SAT 70	MEOCS 42	COM 62		
MEOCS 21	SAT 71	MEOCS 43	SAT 68		
MEOCS 24	RAPS 74	MEOCS 49	RAPS 79		
MEOCS 26	RAPS 75	COM 57	RAPS 88		
MEOCS 27	RAPS 76	COM 58	RAPS 100		
MEOCS 30	RAPS 80	EFF 64			
MEOCS 31	RAPS 81	SAT 72			
MEOCS 32	RAPS 84	RAPS 78			
MEOCS 33	RAPS 91	RAPS 82			
MEOCS 38	RAPS 94	RAPS 83			
MEOCS 39	RAPS 95	RAPS 85			
MEOCS 41	RAPS 96	RAPS 83			
MEOCS 46	RAPS 97	RAPS 89			
MEOCS 50	RAPS 99	RAPS 92			
		RAPS 93			
		RAPS 98			

From examining those items with four or more links, this table suggests that five EO items (MEOCS 10, MEOCS 12, MEOCS 29, MEOCS 44, and MEOCS 48), one commitment item (COM 53), one effectiveness item (EFF 67), one satisfaction item (SAT 73), and three racial attitudes items (RAPS 77, RAPS 87, and RAPS 90) are especially important items.

Examination of Figure 4 suggests some further reasons for the importance of these items. RAPS 90 and MEOCS 44 are near the center of the figure and provide links between one branch of the graph and another. MEOCS 29 and RAPS 77 provide important links in the branch above the center; RAPS 87 provides important links in the branch below the center; MEOCS 10 and MEOCS 12 provide important links in the

branch to the lower left; MEOCS 48 provides important links in the branch to the upper left. EFF 67 is linked to every other effectiveness item and provides a link to the satisfaction items. SAT 73 is linked to the other satisfaction items and provides a link from the satisfaction items to the commitment items. Likewise, COM 53 is linked to other commitment items and provides an important link between the racial attitudes items and the rest of the OE items.

The importance of these items may lie in their centrality to the cluster to which they belong. For example, COM 53 ("I am proud to tell others that I am part of this organization.") is a basic statement of organizational commitment. With some interesting exceptions these 11 items represent the 11 clusters mentioned above. The only ones not included are the Reverse Discrimination clusters of both EO and RAPS items. Differential Command Behavior toward Minorities (Cluster 2 of EO items) is represented by two items (MEOCS 10 and MEOCS 44), as is Discrimination against Minorities and Women (Cluster 1 of RAPS items; RAPS 77 and RAPS 90).

It is noticeable that the EO items dealing with Positive Equal Opportunity Behaviors are strongly linked to the RAPS items dealing with Discrimination against Minorities and Women. The average intra-cluster correlations are .357 and .436 for the Positive Equal Opportunities Behaviors and Discrimination against Minorities and Women clusters respectively, while the average inter-cluster item correlation is .195.

There is a clear distinction between EO items dealing with Reverse Discrimination and RAPS items dealing with the same topic. This is confirmed by the finding that the average intra-cluster item correlation for each cluster is .335 and .310 for the EO and RAPS reverse discrimination clusters respectively, while the average inter-cluster item correlation is .205.

Organizational Effectiveness

The branch to the right in Figure 4 retains the structure of the organizational effectiveness items into the Commitment, Job Satisfaction, and Perceived Work Group Effectiveness clusters. Earlier research suggests the relationship between commitment and effectiveness is positive (Mowday, Porter, & Steers, 1982), while the evidence for a relationship between satisfaction and effectiveness is mixed (Petty, McGee, & Cavender, 1984).

With this information in mind, four scales from the clusters in Table 4 were created: 1) positive commitment (COM+), 2) negative commitment (COM-), 3) effectiveness (only from the Perceived Work Group Effectiveness items; EFF), and 4) satisfaction (SAT). Regression was performed with EFF as the dependent variable and COM+, COM-, and SAT as predictors. The correlations are shown in Table 6 and the regression models shown in Table 7.

As can be seen in Table 6, both COM+ and SAT are strongly correlated with EFF, while there is a much weaker correlation between COM- and EFF. This is also seen in Table 7 where SAT predicts EFF well and COM+ adds a small but significant amount. However, COM- adds little in predicting the value of EFF.

Table 6

Correlations Among Commitment, Effectiveness, and Satisfaction Clusters

	COM+	COM-	SAT
COM-	.566		
SAT	.579	.347	
EFF	.427	.210	.539

Table 7

Regression of Effectiveness Cluster on Commitment and Satisfaction Clusters

Model	R	ΔR	R^2
SAT	.539	.539	.290
SAT, COM+	.557	.018	.310
SAT, COM+, COM-	.559	.002	.312

Discussion

The MDS, clustering, and network analyses support the general structure of the MEOCS as determined by factor analysis, but also provide some added understanding of its structure. The MDS does not provide much new information, generating four dimensions that are consistent with those found in factor analysis. It would be possible to conduct MDS of these data to get the 12 dimensions usually found in factor analysis, but even at four dimensions we are beginning to see asymptote. It is noticeable that two items (MEOCS 44 and RAPS 98) do not weigh strongly on these dimensions. This may suggest that these items have some special characteristics.

In some cases the cluster analyses provided confirmation of the existing factor structure (e.g., Perceived Work Group Environment and Job Satisfaction). In many cases the clusters included items that were excluded in the factors (e.g., the equal opportunity clusters). In one case, the cluster analysis divided an existing factor into two parts (i.e., among the Commitment items). Finally, the cluster analyses suggested a cluster that did not exist in the factor analysis (i.e., among the RAPS items).

Another point that comes through the cluster analyses is the difference between positively and negatively worded statements. Even when statements are all coded in the same direction, positively worded items form separate clusters from the negatively worded items. This holds true for EO items (Cluster 3), for RAPS items (Cluster 4), and for OE items (Cluster 2, the second Commitment cluster).

Although the fit between the data and the Pathfinder network was low, the resulting network generated an interesting model. The branches in the network are made up of clusters or factors consistent with previous factor analysis. For the most part the RAPS items and the EO items are distinct. The one important exception is the RAPS items dealing with Discrimination against Women and Minorities. Those items provided an important link between the EO items dealing Positive Equal Opportunity Behaviors and the rest of the EO items. The OE items are separated from the rest of the MEOCS but are grouped together, in the order: COM, SAT, and EFF.

Certain items appeared to be very important in the network analysis. There are 11 items (MEOCS 10, MEOCS 12, MEOCS 29, MEOCS 44, MEOCS 48, COM 53, EFF 67, SAT 73, RAPS 77, RAPS 87, and RAPS 90) that have four or more links. Two of those items (MEOCS 44 and RAPS 90) are centrally located in the network.

Recommendations

The MEOCS was developed to improve on existing measures of discrimination in the military. While it has achieved that goal, the question arises concerning the future of the MEOCS. Certainly one future goal is revision. As the MEOCS is revised for the next century, its connection to earlier measures such as the RAPS needs to be examined.

There are 27 items from the modified RAPS on the current MEOCS. From the current study it is apparent that the RAPS items dealing with Discrimination Against Minorities and Women are closely linked to other EO clusters. On the other hand, those items dealing with Reverse Discrimination and Attitudes Toward Racial/Gender Separatism appear to be more tangentially related. Should these items be removed from a future version of the MEOCS? This question should be considered especially for the Reverse Discrimination items because there is already a Reverse Discrimination cluster among the EO clusters and the two aspects of Reverse Discrimination are weakly related.

The items dealing with OE (Commitment, Perceived Work Group Effectiveness, and Job Satisfaction) also appear tangential. However, this is to be expected and they should be retained. According to the Landis-Fisher Model of EO Climate (see Figure 1 in Dansby & Landis, 1991), equal opportunity, as seen in EO and RAPS items, should influence occupational satisfaction, commitment, and effectiveness. Using the network analysis in Figure 4 to test this model would provide a stronger basis for determining which groups of items should be retained or removed.

As far as individual items, a future version of the MEOCS should build on the strengths that exist. The 11 items with four or more links should be retained and examined to determine what makes them such good items. Items with few links and low correlations to items within its cluster should be considered for revision or removal. Two good examples are RAPS 95 and RAPS 98 that have few links and are isolated from other RAPS items. These items (RAPS 95: "This organization provides a good career chance for advancement for minorities and women."; and RAPS 98: "In this organization, I have personally felt discriminated against because of my race.") are probably viewed as examples of Discrimination Against Minorities and Women for minorities, and as examples of Reverse Discrimination for members of the majority.

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Appendix A

First 100 Items from the MEOCS

During the last 30 duty days at your duty location:

Organization parties, picnics, award ceremonies and other special events were attended by both majority and minority personnel. (MEOCS 1)

The spouses of majority and minority personnel mixed and mingled during special events. (MEOCS 2)

A majority person told several jokes about minorities. (MEOCS 3)

The commander/CO did not appoint a qualified majority in a key position, but instead appointed a less qualified minority. (MEOCS 4)

Majority and minority supervisors were seen having lunch together. (MEOCS 5)

A majority first-level supervisor made demeaning comments about minority subordinates. (MEOCS 6)

Majority and minority personnel were seen having lunch together. (MEOCS 7)

A race relations survey was taken, but no groups other than blacks and whites were used. (MEOCS 8)

A majority member in your organization directed a racial slur at a member of another organization. (MEOCS 9)

A majority supervisor frequently reprimanded a minority subordinate but rarely reprimanded a majority subordinate. (MEOCS 10)

The supervisor had lunch with a new minority member (to make him/her feel welcome), but did not have lunch with a majority member who had joined the organization a few weeks earlier. (MEOCS 11)

A group of majority and minority personnel made reference to an ethnic group other than their own using insulting ethnic names. (MEOCS 12)

Graffiti written on the organization's rest room or latrine "put down" minorities or women. (MEOCS 13)

A new minority person joined the organization and quickly developed close majority friends from within the organization. (MEOCS 14)

A minority man made off-color remarks about a minority woman. (MEOCS 15)

A supervisor discouraged cross-racial dating among personnel who would otherwise be free to date within the organization. (MEOCS 16)

A minority man was selected for a prestigious assignment over a majority man who was equally, if not slightly better, qualified. (MEOCS 17)

A majority supervisor did not select a qualified minority subordinate for promotion. (MEOCS 18)

When the Commander/CO held staff meetings, women and minorities, as well as majority men, were asked to contribute suggestions to solve problems. (MEOCS 19)

A majority member complained that there was too much interracial dating among other people in the organization. (MEOCS 20)

A supervisor always gave the less desirable additional duties to men. (MEOCS 21)

A minority woman was selected to receive an award for an outstanding act even though she was not perceived by her peers as being as qualified as her nearest competitor, a majority man. (MEOCS 22)

A minority member was assigned less desirable office space than a majority member. (MEOCS 23)

The term “dyke” (meaning lesbian), referring to a particular woman, was overheard in a conversation between unit personnel. (MEOCS 24)

The Commander/CO changed duty assignments when it was discovered that two persons of the same minority were assigned to the same sensitive area on the same shift. (MEOCS 25)

Minorities and majority members sat at separate tables in the cafeteria or designated eating area during lunch hour. (MEOCS 26)

Most equal opportunity staff were either females or minorities. (MEOCS 27)

A Commander/CO giving a lecture took more time to answer questions from majority members than from minority members. (MEOCS 28)

Majority and minority members were seen socializing together. (MEOCS 29)

When reprimanding a male minority member, the majority supervisor used terms such as "boy." (MEOCS 30)

Second level female supervisors had both male and female subordinates. (MEOCS 31)

A male supervisor touched a female peer in a friendly manner, but never touched male peers. (MEOCS 32)

A majority and a minority person turned in similar pieces of equipment with similar problems. The minority person was given a new issue; the majority member's equipment was sent to maintenance for repair. (MEOCS 33)

A motivational speech to a minority subordinate focused on the lack of opportunity elsewhere; to a majority subordinate, it focused on promotion. (MEOCS 34)

Majority personnel joined minority friends at the same table in the cafeteria or designated eating area. (MEOCS 35)

When a female subordinate was promoted, a male peer made the comment, "I wonder who she slept with to get promoted so fast." (MEOCS 36)

A supervisor gave the same punishment to minority and majority subordinates for the same offense. (MEOCS 37)

A qualified minority first-level supervisor was denied an opportunity for professional education by his/her supervisor. A majority first-level supervisor with the same qualifications was given the opportunity. (MEOCS 38)

When a woman complained of sexual harassment to her superior, he told her, "You're being too sensitive." (MEOCS 39)

Offensive racial/ethnic names are frequently heard. (MEOCS 40)

The only woman in a work group was expected to provide housekeeping supplies, such as needle and thread, aspirin, etc., in her desk. (MEOCS 41)

Racial/ethnic jokes were frequently heard. (MEOCS 42)

A woman was asked to take notes and provide refreshments at staff meetings (such duties were not part of her job assignment). (MEOCS 43)

A supervisor gave a minority subordinate a severe punishment for a minor infraction. A majority member who committed the same offense was given a less severe penalty. (MEOCS 44)

A better qualified man was not picked for a good additional duty assignment because the Commander/CO said it would look better for equal opportunity to have a woman take this duty. (MEOCS 45)

A supervisor referred to female subordinates by their first names in public, while using titles for the male subordinates. (MEOCS 46)

The Commander/CO assigned an attractive woman to escort visiting male officials around because, "We need someone nice looking to show them around." (MEOCS 47)

A woman who complained of sexual harassment was not recommended for promotion. (MEOCS 48)

A man stated, "Our unit worked together better before we had women in the organization." (MEOCS 49)

At non-official social activities, minorities and majority members were seen socializing in the same group. (MEOCS 50)

I would accept almost any type of assignment in order to stay in this organization. (COM 51)

I find my values and the organization's values are very similar. (COM 52)

I am proud to tell others that I am part of this organization. (COM 53)

I could just as well be working in another organization as long as the type of work was similar. (COM 54)

I feel little loyalty to this organization. (COM 55)

This organization really inspires me to perform my job in the very best manner possible. (COM 56)

It would take very little change in my present circumstances to cause me to leave this organization. (COM 57)

I am extremely glad to be part of this organization compared to other, similar organizations I could be in. (COM 58)

Assuming I could stay, there's not too much to be gained by sticking with this organization to retirement. (COM 59)

Often, I find it difficult to agree with the policies of this organization on important matters relating to its people. (COM 60)

For me, this organization is the best of all possible ways to serve my country. (COM 61)

Becoming part of this organization was definitely not a good move for me. (COM 62)

The amount of output of my work group is very high. (EFF 63)

The quality of output of my work group is very high. (EFF 64)

When high priority work arises, such as short suspenses, crash programs, and schedule changes, the people in my work group do an outstanding job in handling these situations. (EFF 65)

My work group always gets maximum output from available resources (e.g., personnel and materials). (EFF 66)

My work group's performance in comparison to similar work groups is very high. (EFF 67)

Level of satisfaction with:

The chance to help people and improve their welfare through the performance of my job. (SAT 68)

My amount of effort compared to the effort of my co-workers. (SAT 69)

The recognition and pride my family has in the work I do. (SAT 70)

My job security (SAT 71)

The chance to acquire valuable skills in my job that prepare me for future opportunities (SAT 72)

My job as a whole. (SAT 73)

Minorities were better off before this equal opportunity business got started. (RAPS 74)

More severe punishments are given out to minority as compared to majority offenders for same types of offenses. (RAPS 75)

Majority supervisors in charge of minority supervisors doubt minorities' abilities. (RAPS 76)

Minorities get more extra work details than majority members. (RAPS 77)

I understand the feelings of people of other races better since I became associated with the military. (RAPS 78)

The military is fully committed to the principle of fair treatment for all its members. (RAPS 79)

After duty hours, people should stick together in groups made up of their race only (e.g., minorities only with minorities and majority members with majority members). (RAPS 80)

Majority males act as though stereotypes about minorities and women are true (for example, "Blacks are lazy"). (RAPS 81)

Trying to bring about the integration of women and minorities is more trouble than it's worth. (RAPS 82)

If the race problem can be solved anywhere, it can be solved in the military. (RAPS 83)

Majority males have a better chance than minorities or women to get the best training opportunities. (RAPS 84)

Majority males assume that minorities commit every crime that occurs, such as thefts in living quarters. (RAPS 85)

Majority males do not show proper respect for minorities or women of higher rank. (RAPS 86)

Minorities and majority members would be better off if they lived and worked only with people of their own races. (RAPS 87)

I dislike the idea of having a supervisor of a race different from mine. (RAPS 88)

Majority males are not willing to accept criticism from minorities or women. (RAPS 89)

Majority members get away with breaking rules that result in punishment for minorities. (RAPS 90)

Some minorities get promoted just because they are minorities. (RAPS 91)

Power in the hands of minorities is a dangerous thing. (RAPS 92)

Minorities and women frequently cry “prejudice” rather than accept responsibility for personal faults. (RAPS 93)

I would not like to have a supervisor of the opposite sex. (RAPS 94)

This organization provides a good career chance for advancement for minorities and women. (RAPS 95)
Minorities and women get away with breaking rules that majority males are punished for. (RAPS 96)

There should be more close friendships between minorities and majority members in this organization. (RAPS 97)

In this organization, I have personally felt discriminated against because of my race. (RAPS 98)

Minorities don’t take advantage of the educational opportunities that are available to them. (RAPS 99)

Many minorities act as they are superior to majority members. (RAPS 100)

Appendix B

Correlations between MEOCS Items

Item	MEOCS 1	MEOCS 2	MEOCS 3	MEOCS 4	MEOCS 5	MEOCS 6	MEOCS 7	MEOCS 8	MEOCS 9
MEOCS 2	.508								
MEOCS 3	.073	.090							
MEOCS 4	.072	.051	.223						
MEOCS 5	.337	.405	.077	.041					
MEOCS 6	.149	.150	.465	.268	.145				
MEOCS 7	.346	.377	.050	.083	.564	.158			
MEOCS 8	.134	.110	.240	.264	.110	.320	.139		
MEOCS 9	.129	.125	.405	.255	.094	.467	.116	.348	
MEOCS 10	.187	.192	.325	.227	.180	.476	.194	.360	.499
MEOCS 11	.115	.085	.230	.357	.063	.316	.117	.355	.370
MEOCS 12	.100	.110	.442	.265	.069	.427	.084	.310	.519
MEOCS 13	.105	.118	.338	.179	.093	.339	.100	.264	.348
MEOCS 14	.250	.309	.034	.031	.358	.107	.392	.065	.085
MEOCS 15	.041	.064	.373	.263	.017	.353	.019	.255	.381
MEOCS 16	.163	.130	.270	.249	.128	.385	.180	.349	.422
MEOCS 17	.056	.053	.208	.442	.025	.251	.054	.270	.277
MEOCS 18	.173	.174	.284	.234	.165	.407	.175	.323	.412
MEOCS 19	.302	.292	.083	.095	.330	.147	.343	.136	.141
MEOCS 20	.136	.126	.327	.230	.127	.373	.147	.327	.378
MEOCS 21	.052	.077	.230	.246	.037	.223	.040	.218	.269
MEOCS 22	.063	.066	.195	.359	.040	.236	.070	.257	.275
MEOCS 23	.174	.161	.272	.233	.156	.383	.186	.333	.411
MEOCS 24	.032	.067	.346	.161	.015	.285	.002	.182	.316
MEOCS 25	.170	.144	.256	.249	.140	.345	.180	.342	.379
MEOCS 26	.073	.155	.256	.178	.123	.270	.134	.202	.270
MEOCS 27	-.038	-.001	.089	.207	-.033	.112	-.030	.130	.146
MEOCS 28	.177	.159	.268	.241	.160	.362	.189	.339	.381
MEOCS 29	.302	.328	.076	.108	.389	.165	.474	.155	.147
MEOCS 30	.168	.146	.310	.203	.139	.376	.161	.307	.396
MEOCS 31	.219	.211	.029	.011	.241	.059	.263	.060	.064
MEOCS 32	.050	.069	.274	.200	.038	.294	.040	.229	.305
MEOCS 33	.122	.109	.229	.315	.097	.281	.128	.298	.311
MEOCS 34	.166	.171	.290	.219	.162	.381	.178	.324	.387
MEOCS 35	.276	.312	.074	.091	.370	.151	.438	.137	.139
MEOCS 36	.067	.101	.318	.218	.063	.309	.054	.217	.324
MEOCS 37	.271	.282	.091	.102	.320	.192	.341	.137	.168
MEOCS 38	.167	.167	.265	.197	.159	.365	.175	.303	.375
MEOCS 39	.103	.102	.288	.211	.095	.341	.097	.266	.340
MEOCS 40	.125	.153	.458	.198	.122	.402	.110	.255	.444
MEOCS 41	.101	.090	.260	.205	.083	.300	.102	.264	.324
MEOCS 42	.113	.141	.501	.192	.106	.394	.086	.240	.428
MEOCS 43	.105	.102	.271	.221	.099	.331	.105	.277	.334
MEOCS 44	.188	.196	.283	.181	.188	.392	.198	.298	.393
MEOCS 45	.080	.089	.237	.349	.063	.269	.081	.269	.285
MEOCS 46	.112	.117	.279	.238	.099	.329	.106	.276	.332
MEOCS 47	.102	.106	.275	.265	.094	.316	.101	.285	.314
MEOCS 48	.123	.122	.286	.232	.119	.344	.119	.289	.341
MEOCS 49	.075	.095	.299	.202	.069	.302	.069	.228	.311
MEOCS 50	.290	.339	.078	.102	.374	.147	.431	.144	.138
COM 51	.090	.128	.067	.020	.107	.078	.087	.010	.067
COM 52	.191	.229	.141	.120	.200	.167	.187	.104	.170
COM 53	.207	.218	.112	.151	.199	.171	.214	.130	.202
COM 54	-.031	-.006	.017	.031	-.014	.018	-.036	-.003	.021
COM 55	.121	.137	.119	.141	.122	.160	.126	.127	.180
COM 56	.153	.185	.127	.124	.161	.152	.153	.086	.155
COM 57	.050	.072	.091	.090	.060	.095	.052	.072	.099
COM 58	.169	.186	.101	.117	.164	.137	.168	.099	.161
COM 59	.068	.099	.092	.104	.074	.115	.074	.074	.139
COM 60	.092	.140	.162	.128	.107	.170	.086	.095	.163
COM 61	.126	.164	.105	.081	.140	.118	.119	.057	.113
COM 62	.144	.156	.131	.143	.135	.184	.155	.138	.208
EFF 63	.158	.145	.107	.106	.142	.122	.160	.126	.136
EFF 64	.177	.162	.116	.120	.158	.148	.186	.139	.160

Correlations between MEOCS Items (continued)

Item	MEOCS 1	MEOCS 2	MEOCS 3	MEOCS 4	MEOCS 5	MEOCS 6	MEOCS 7	MEOCS 8	MEOCS 9
EFF 65	.200	.185	.125	.116	.182	.159	.207	.152	.170
EFF 66	.160	.168	.128	.106	.149	.141	.155	.110	.148
EFF 67	.179	.164	.107	.107	.163	.141	.185	.134	.147
SAT 68	.156	.156	.126	.122	.151	.126	.158	.119	.144
SAT 69	.128	.124	.089	.097	.121	.102	.136	.095	.111
SAT 70	.143	.145	.078	.111	.142	.111	.156	.106	.114
SAT 71	.125	.134	.081	.119	.130	.109	.125	.089	.105
SAT 72	.129	.151	.098	.113	.134	.113	.130	.083	.121
SAT 73	.162	.176	.133	.122	.162	.153	.164	.110	.156
RAPS 74	.082	.062	.095	.163	.066	.106	.102	.139	.131
RAPS 75	.179	.196	.194	.081	.199	.292	.206	.206	.277
RAPS 76	.183	.222	.238	.126	.222	.340	.221	.219	.304
RAPS 77	.204	.214	.216	.112	.224	.321	.238	.234	.301
RAPS 78	.087	.081	.038	.059	.092	.026	.098	.041	.037
RAPS 79	.196	.227	.155	.133	.216	.196	.202	.129	.182
RAPS 80	.143	.135	.150	.184	.148	.196	.206	.214	.224
RAPS 81	.140	.196	.285	.120	.181	.316	.175	.195	.308
RAPS 82	.127	.131	.167	.201	.124	.172	.155	.189	.198
RAPS 83	.136	.160	.092	.083	.155	.105	.157	.069	.112
RAPS 84	.136	.165	.177	.055	.170	.256	.162	.172	.237
RAPS 85	.161	.205	.241	.096	.197	.295	.191	.207	.285
RAPS 86	.160	.190	.237	.105	.188	.299	.179	.205	.286
RAPS 87	.163	.150	.181	.201	.159	.214	.202	.241	.242
RAPS 88	.153	.140	.176	.192	.154	.217	.195	.227	.241
RAPS 89	.139	.185	.216	.100	.178	.288	.174	.178	.270
RAPS 90	.194	.215	.214	.100	.220	.314	.218	.224	.298
RAPS 91	.018	.048	.119	.255	.031	.112	.023	.101	.114
RAPS 92	.131	.129	.158	.235	.131	.184	.168	.202	.207
RAPS 93	-.028	.010	.116	.186	-.023	.058	-.033	.061	.072
RAPS 94	.098	.104	.143	.142	.101	.150	.123	.160	.172
RAPS 95	.198	.201	.085	.051	.215	.151	.224	.117	.160
RAPS 96	.072	.081	.141	.265	.068	.143	.093	.158	.162
RAPS 97	.039	.009	-.052	.032	.032	-.038	.063	.002	-.011
RAPS 98	.170	.204	.209	.217	.197	.286	.204	.221	.286
RAPS 99	.066	.095	.137	.149	.075	.132	.074	.128	.135
RAPS 100	.063	.097	.174	.231	.070	.139	.071	.138	.157

Item	MEOCS 10	MEOCS 11	MEOCS 12	MEOCS 13	MEOCS 14	MEOCS 15	MEOCS 16	MEOCS 17	MEOCS 18
MEOCS 11	.401								
MEOCS 12	.432	.405							
MEOCS 13	.342	.293	.415						
MEOCS 14	.142	.035	.031	.033					
MEOCS 15	.314	.342	.475	.402	-.037				
MEOCS 16	.436	.397	.383	.341	.099	.343			
MEOCS 17	.247	.422	.331	.258	-.026	.379	.340		
MEOCS 18	.537	.350	.386	.327	.125	.309	.457	.327	
MEOCS 19	.193	.122	.107	.105	.335	.029	.175	.042	.198
MEOCS 20	.394	.360	.397	.384	.077	.365	.509	.316	.421
MEOCS 21	.251	.287	.326	.261	.002	.330	.256	.327	.272
MEOCS 22	.256	.372	.325	.243	.005	.341	.300	.474	.299
MEOCS 23	.494	.367	.381	.322	.126	.304	.459	.285	.531
MEOCS 24	.259	.216	.395	.339	-.016	.416	.245	.246	.255
MEOCS 25	.427	.378	.363	.321	.102	.294	.462	.307	.457
MEOCS 26	.290	.231	.317	.302	.090	.327	.246	.251	.296
MEOCS 27	.133	.182	.186	.123	-.026	.226	.126	.260	.158
MEOCS 28	.451	.365	.361	.319	.121	.290	.447	.282	.476
MEOCS 29	.200	.143	.107	.108	.400	.041	.211	.076	.187
MEOCS 30	.431	.334	.386	.352	.092	.307	.427	.258	.430
MEOCS 31	.080	.042	.041	.051	.243	-.042	.075	-.026	.064
MEOCS 32	.309	.282	.339	.278	.014	.355	.303	.282	.332
MEOCS 33	.318	.412	.338	.289	.051	.335	.366	.413	.339
MEOCS 34	.478	.347	.378	.329	.121	.311	.417	.279	.505
MEOCS 35	.192	.123	.106	.111	.386	.040	.186	.062	.175
MEOCS 36	.303	.255	.369	.311	.028	.379	.279	.293	.333

Correlations between MEOCS Items (continued)

Item	MEOCS 10	MEOCS 11	MEOCS 12	MEOCS 13	MEOCS 14	MEOCS 15	MEOCS 16	MEOCS 17	MEOCS 18
MEOCS 37	.269	.142	.128	.103	.333	.048	.198	.068	.246
MEOCS 38	.476	.320	.346	.301	.125	.276	.402	.240	.509
MEOCS 39	.358	.300	.344	.297	.061	.343	.364	.277	.375
MEOCS 40	.376	.277	.506	.403	.070	.422	.335	.268	.367
MEOCS 41	.333	.303	.337	.282	.060	.312	.354	.266	.347
MEOCS 42	.352	.258	.496	.384	.052	.410	.312	.257	.345
MEOCS 43	.364	.316	.340	.284	.063	.322	.368	.288	.388
MEOCS 44	.540	.310	.362	.324	.149	.279	.407	.221	.532
MEOCS 45	.281	.350	.328	.264	.028	.339	.305	.434	.321
MEOCS 46	.358	.333	.356	.298	.063	.344	.360	.310	.378
MEOCS 47	.326	.326	.340	.297	.052	.335	.353	.336	.359
MEOCS 48	.376	.320	.351	.315	.071	.336	.376	.304	.408
MEOCS 49	.295	.267	.358	.320	.034	.369	.295	.282	.306
MEOCS 50	.196	.129	.110	.113	.380	.049	.172	.073	.183
COM 51	.086	.014	.075	.080	.107	.071	.024	.022	.071
COM 52	.203	.120	.180	.160	.182	.146	.125	.118	.188
COM 53	.231	.165	.191	.166	.197	.145	.177	.138	.213
COM 54	.027	.008	.028	.021	-.021	.042	-.009	.034	.029
COM 55	.198	.155	.177	.147	.112	.142	.161	.136	.191
COM 56	.167	.115	.164	.137	.159	.147	.112	.124	.156
COM 57	.103	.095	.116	.096	.047	.111	.079	.100	.100
COM 58	.185	.127	.160	.145	.165	.127	.127	.110	.170
COM 59	.139	.104	.147	.112	.075	.126	.099	.109	.131
COM 60	.174	.113	.177	.155	.082	.167	.115	.142	.165
COM 61	.140	.076	.133	.130	.131	.124	.072	.083	.124
COM 62	.226	.174	.201	.177	.128	.157	.196	.148	.208
EFF 63	.140	.139	.139	.116	.143	.109	.146	.104	.137
EFF 64	.166	.160	.157	.140	.161	.121	.176	.115	.158
EFF 65	.195	.170	.172	.161	.168	.123	.185	.121	.184
EFF 66	.160	.132	.164	.144	.141	.137	.128	.114	.152
EFF 67	.168	.153	.148	.131	.160	.110	.164	.108	.160
SAT 68	.138	.141	.163	.137	.137	.135	.141	.126	.134
SAT 69	.112	.121	.122	.099	.119	.104	.115	.100	.105
SAT 70	.122	.131	.115	.096	.145	.094	.132	.104	.117
SAT 71	.117	.108	.108	.089	.120	.099	.101	.114	.120
SAT 72	.123	.107	.132	.102	.129	.114	.095	.114	.124
SAT 73	.168	.136	.172	.145	.147	.145	.136	.126	.155
RAPS 74	.093	.168	.135	.099	.054	.109	.171	.173	.093
RAPS 75	.412	.182	.228	.207	.191	.145	.290	.078	.396
RAPS 76	.421	.208	.268	.236	.210	.195	.301	.135	.413
RAPS 77	.436	.218	.253	.233	.205	.166	.318	.115	.427
RAPS 78	.015	.043	.041	.009	.101	.020	.041	.052	.022
RAPS 79	.234	.142	.182	.153	.192	.144	.161	.138	.226
RAPS 80	.217	.239	.209	.185	.150	.161	.285	.200	.214
RAPS 81	.347	.183	.303	.261	.169	.250	.271	.147	.335
RAPS 82	.175	.221	.218	.185	.103	.186	.220	.234	.180
RAPS 83	.115	.079	.106	.083	.156	.070	.091	.082	.114
RAPS 84	.346	.145	.200	.170	.165	.140	.240	.055	.351
RAPS 85	.377	.178	.267	.242	.178	.195	.270	.113	.369
RAPS 86	.369	.187	.265	.230	.167	.206	.273	.118	.364
RAPS 87	.248	.265	.245	.221	.141	.191	.291	.230	.248
RAPS 88	.249	.259	.235	.209	.138	.183	.292	.217	.249
RAPS 89	.345	.172	.244	.199	.168	.190	.259	.122	.340
RAPS 90	.446	.205	.256	.226	.200	.171	.303	.104	.434
RAPS 91	.076	.173	.159	.105	.022	.202	.098	.313	.105
RAPS 92	.186	.258	.223	.184	.114	.195	.247	.275	.197
RAPS 93	.000	.124	.149	.102	-.037	.208	.037	.246	.012
RAPS 94	.160	.184	.188	.183	.084	.162	.192	.167	.162
RAPS 95	.222	.097	.114	.091	.219	.039	.162	.017	.227
RAPS 96	.109	.249	.207	.155	.057	.231	.173	.322	.116
RAPS 97	-.043	.018	-.022	-.049	.076	-.035	.012	.013	-.040
RAPS 98	.344	.252	.275	.232	.176	.231	.278	.244	.336
RAPS 99	.138	.160	.168	.147	.057	.180	.138	.184	.144
RAPS 100	.103	.216	.224	.180	.040	.261	.141	.298	.109

Correlations between MEOCS Items (continued)

Item	MEOCS 19	MEOCS 20	MEOCS 21	MEOCS 22	MEOCS 23	MEOCS 24	MEOCS 25	MEOCS 26	MEOCS 27
MEOCS 20	.140								
MEOCS 21	.038	.303							
MEOCS 22	.050	.321	.411						
MEOCS 23	.194	.437	.301	.372					
MEOCS 24	.016	.307	.316	.297	.286				
MEOCS 25	.187	.442	.275	.337	.534	.284			
MEOCS 26	.064	.297	.281	.269	.304	.339	.306		
MEOCS 27	-.059	.137	.245	.282	.168	.206	.165	.278	
MEOCS 28	.215	.434	.270	.312	.533	.248	.522	.314	.186
MEOCS 29	.385	.172	.042	.085	.211	-.004	.214	.143	-.032
MEOCS 30	.190	.427	.263	.282	.468	.288	.466	.278	.109
MEOCS 31	.335	.032	-.033	-.067	.058	-.059	.074	-.022	-.126
MEOCS 32	.037	.335	.300	.339	.356	.372	.335	.302	.220
MEOCS 33	.130	.371	.311	.409	.393	.260	.419	.280	.216
MEOCS 34	.181	.414	.288	.320	.520	.295	.484	.328	.177
MEOCS 35	.365	.153	.059	.077	.191	.015	.184	.191	-.017
MEOCS 36	.059	.320	.315	.366	.331	.457	.312	.320	.223
MEOCS 37	.371	.152	.077	.092	.237	.031	.210	.102	-.014
MEOCS 38	.191	.385	.247	.283	.521	.258	.460	.291	.149
MEOCS 39	.110	.370	.232	.301	.400	.329	.381	.274	.173
MEOCS 40	.133	.390	.304	.284	.370	.452	.360	.352	.160
MEOCS 41	.111	.357	.209	.286	.387	.305	.386	.258	.173
MEOCS 42	.116	.368	.296	.269	.346	.451	.336	.330	.148
MEOCS 43	.112	.374	.244	.316	.423	.304	.405	.278	.191
MEOCS 44	.211	.389	.257	.269	.528	.276	.464	.313	.138
MEOCS 45	.070	.325	.360	.472	.346	.315	.359	.290	.287
MEOCS 46	.119	.374	.299	.355	.409	.328	.395	.301	.212
MEOCS 47	.107	.372	.300	.370	.394	.325	.397	.295	.217
MEOCS 48	.129	.389	.237	.323	.426	.326	.413	.288	.179
MEOCS 49	.069	.337	.285	.328	.326	.404	.322	.306	.195
MEOCS 50	.363	.151	.067	.084	.194	.023	.183	.173	.001
COM 51	.106	.037	.077	.036	.048	.109	.025	.105	.034
COM 52	.231	.132	.162	.144	.169	.172	.149	.164	.073
COM 53	.257	.158	.168	.168	.215	.146	.195	.164	.094
COM 54	-.038	.005	.044	.044	.018	.049	-.003	.061	.080
COM 55	.155	.150	.158	.159	.190	.144	.178	.152	.098
COM 56	.190	.116	.162	.145	.142	.159	.121	.156	.096
COM 57	.066	.094	.116	.111	.099	.110	.093	.106	.082
COM 58	.213	.125	.147	.131	.164	.134	.147	.143	.080
COM 59	.090	.095	.150	.137	.123	.142	.109	.143	.116
COM 60	.106	.129	.172	.159	.142	.193	.125	.169	.105
COM 61	.153	.096	.129	.100	.109	.140	.087	.148	.080
COM 62	.176	.175	.176	.167	.212	.158	.200	.172	.098
EFF 63	.190	.143	.107	.106	.157	.084	.164	.088	.020
EFF 64	.213	.164	.110	.117	.178	.090	.186	.099	.024
EFF 65	.239	.181	.122	.127	.198	.104	.209	.111	.009
EFF 66	.187	.137	.131	.123	.152	.131	.151	.125	.045
EFF 67	.212	.160	.099	.113	.175	.086	.183	.096	.016
SAT 68	.197	.147	.144	.131	.148	.124	.157	.117	.045
SAT 69	.162	.116	.101	.107	.121	.089	.129	.086	.039
SAT 70	.183	.121	.100	.109	.135	.067	.139	.084	.051
SAT 71	.150	.105	.112	.118	.119	.078	.112	.097	.080
SAT 72	.166	.095	.133	.113	.114	.105	.110	.118	.080
SAT 73	.196	.143	.154	.133	.155	.141	.150	.144	.066
RAPS 74	.109	.152	.125	.167	.129	.076	.165	.075	.054
RAPS 75	.210	.256	.140	.124	.386	.147	.317	.199	.054
RAPS 76	.213	.284	.177	.173	.392	.189	.328	.250	.096
RAPS 77	.240	.287	.163	.156	.430	.157	.356	.216	.056
RAPS 78	.119	.037	.028	.041	.030	.003	.047	.007	-.015
RAPS 79	.241	.163	.149	.151	.205	.153	.180	.160	.066
RAPS 80	.187	.265	.158	.197	.257	.108	.284	.180	.077
RAPS 81	.162	.286	.189	.176	.324	.263	.284	.278	.112
RAPS 82	.160	.225	.201	.239	.208	.160	.237	.173	.099
RAPS 83	.170	.086	.077	.087	.104	.077	.100	.087	.011
RAPS 84	.169	.217	.099	.094	.336	.148	.267	.179	.064

Correlations between MEOCS Items (continued)

Item	MEOCS 19	MEOCS 20	MEOCS 21	MEOCS 22	MEOCS 23	MEOCS 24	MEOCS 25	MEOCS 26	MEOCS 27
RAPS 85	.184	.276	.170	.156	.356	.216	.305	.247	.088
RAPS 86	.194	.273	.152	.157	.356	.216	.304	.223	.088
RAPS 87	.204	.296	.187	.230	.290	.145	.320	.192	.082
RAPS 88	.199	.288	.174	.214	.288	.137	.311	.179	.078
RAPS 89	.160	.250	.141	.154	.327	.200	.276	.218	.095
RAPS 90	.229	.280	.152	.151	.419	.172	.345	.218	.071
RAPS 91	.021	.122	.203	.289	.106	.171	.114	.173	.241
RAPS 92	.169	.251	.189	.259	.231	.142	.267	.166	.112
RAPS 93	-.041	.085	.208	.241	.022	.195	.048	.164	.209
RAPS 94	.144	.201	.170	.175	.189	.147	.210	.149	.081
RAPS 95	.280	.125	.044	.039	.213	.038	.179	.065	-.031
RAPS 96	.098	.187	.266	.323	.150	.175	.183	.175	.185
RAPS 97	.088	-.004	-.025	.008	-.008	-.057	.013	-.057	-.019
RAPS 98	.201	.269	.232	.251	.322	.200	.297	.262	.153
RAPS 99	.072	.159	.162	.184	.153	.147	.160	.154	.109
RAPS 100	.077	.191	.233	.279	.128	.209	.158	.203	.166

Item	MEOCS 28	MEOCS 29	MEOCS 30	MEOCS 31	MEOCS 32	MEOCS 33	MEOCS 34	MEOCS 35	MEOCS 36
MEOCS 29	.240								
MEOCS 30	.498	.190							
MEOCS 31	.090	.340	.090						
MEOCS 32	.338	.048	.349	-.159					
MEOCS 33	.409	.157	.389	.024	.367				
MEOCS 34	.515	.201	.476	.059	.393	.455			
MEOCS 35	.205	.555	.178	.325	.046	.131	.187		
MEOCS 36	.309	.050	.328	-.090	.464	.320	.390	.044	
MEOCS 37	.233	.416	.207	.301	.075	.152	.245	.445	.085
MEOCS 38	.495	.191	.453	.059	.361	.376	.540	.186	.373
MEOCS 39	.397	.122	.384	-.034	.438	.355	.422	.104	.442
MEOCS 40	.367	.111	.430	.050	.376	.341	.413	.122	.443
MEOCS 41	.394	.135	.377	.029	.378	.358	.404	.117	.378
MEOCS 42	.344	.088	.404	.042	.367	.320	.389	.096	.442
MEOCS 43	.413	.132	.389	-.042	.434	.368	.438	.110	.425
MEOCS 44	.496	.207	.470	.077	.349	.362	.552	.205	.363
MEOCS 45	.349	.095	.316	-.060	.371	.415	.374	.081	.420
MEOCS 46	.410	.130	.387	-.038	.457	.389	.436	.118	.434
MEOCS 47	.400	.125	.368	-.045	.430	.387	.418	.107	.449
MEOCS 48	.422	.144	.396	.000	.414	.378	.446	.124	.437
MEOCS 49	.321	.079	.327	-.023	.387	.325	.361	.075	.469
MEOCS 50	.204	.536	.168	.300	.050	.143	.193	.537	.061
COM 51	.032	.085	.044	.076	.052	.026	.063	.105	.089
COM 52	.157	.193	.172	.163	.130	.148	.184	.212	.187
COM 53	.208	.237	.205	.170	.129	.184	.211	.246	.164
COM 54	.006	-.052	-.002	-.060	.046	.016	.023	-.049	.062
COM 55	.186	.129	.183	.090	.131	.173	.195	.139	.162
COM 56	.135	.172	.140	.119	.123	.134	.151	.180	.163
COM 57	.098	.049	.096	.041	.096	.111	.114	.053	.119
COM 58	.157	.192	.161	.142	.106	.146	.166	.200	.137
COM 59	.114	.068	.119	.065	.104	.123	.136	.080	.144
COM 60	.132	.076	.147	.061	.144	.144	.171	.088	.207
COM 61	.101	.128	.110	.093	.097	.100	.120	.144	.132
COM 62	.207	.161	.215	.129	.132	.194	.218	.170	.165
EFF 63	.168	.196	.159	.141	.099	.148	.149	.191	.096
EFF 64	.191	.226	.184	.169	.102	.169	.171	.221	.099
EFF 65	.208	.235	.214	.191	.111	.185	.197	.238	.114
EFF 66	.155	.173	.161	.142	.115	.149	.157	.181	.133
EFF 67	.188	.220	.181	.158	.106	.162	.167	.216	.097
SAT 68.	.161	.188	.166	.150	.104	.160	.148	.191	.120
SAT 69	.131	.164	.131	.126	.083	.132	.118	.163	.087
SAT 70.	.148	.198	.132	.129	.081	.135	.124	.190	.077
SAT 71	.121	.154	.108	.082	.081	.120	.117	.146	.104
SAT 72	.117	.156	.114	.140	.078	.121	.121	.157	.107
SAT 73	.157	.185	.165	.145	.111	.156	.165	.190	.138
RAPS 74	.158	.126	.162	.108	.074	.195	.125	.117	.091

Correlations between MEOCS Items (continued)

Item	MEOCS 28	MEOCS 29	MEOCS 30	MEOCS 31	MEOCS 32	MEOCS 33	MEOCS 34	MEOCS 35	MEOCS 36
RAPS 75	.351	.214	.318	.117	.210	.202	.393	.217	.212
RAPS 76	.361	.235	.332	.114	.248	.235	.416	.238	.267
RAPS 77	.394	.252	.360	.142	.228	.243	.428	.252	.231
RAPS 78	.038	.125	.045	.097	.005	.057	.024	.125	.013
RAPS 79	.195	.214	.200	.151	.139	.175	.224	.228	.191
RAPS 80	.282	.253	.267	.146	.137	.265	.252	.244	.132
RAPS 81	.302	.191	.302	.076	.269	.220	.359	.203	.322
RAPS 82	.230	.177	.236	.138	.148	.264	.219	.180	.186
RAPS 83	.097	.166	.112	.136	.061	.100	.110	.181	.105
RAPS 84	.304	.173	.265	.073	.220	.158	.349	.175	.226
RAPS 85	.326	.196	.315	.091	.254	.215	.386	.209	.289
RAPS 86	.336	.193	.316	.083	.270	.216	.376	.196	.299
RAPS 87	.315	.246	.310	.150	.175	.306	.287	.238	.176
RAPS 88	.314	.236	.299	.144	.173	.292	.283	.226	.169
RAPS 89	.299	.183	.280	.064	.263	.195	.349	.186	.292
RAPS 90	.384	.228	.352	.118	.248	.232	.431	.231	.257
RAPS 91	.113	.041	.095	-.031	.169	.216	.124	.038	.228
RAPS 92	.258	.203	.253	.126	.172	.305	.238	.194	.193
RAPS 93	.039	-.025	.052	-.045	.138	.168	.048	-.020	.195
RAPS 94	.211	.145	.210	.161	.115	.213	.196	.146	.147
RAPS 95	.200	.254	.183	.220	.073	.104	.209	.259	.093
RAPS 96	.173	.122	.170	.072	.160	.300	.162	.120	.197
RAPS 97	.008	.106	.000	.078	-.044	.015	-.035	.098	-.058
RAPS 98	.306	.223	.298	.114	.207	.293	.345	.226	.248
RAPS 99	.161	.081	.159	.046	.148	.199	.175	.085	.173
RAPS 100	.151	.084	.171	.048	.182	.279	.158	.093	.236

Item	MEOCS 37	MEOCS 38	MEOCS 39	MEOCS 40	MEOCS 41	MEOCS 42	MEOCS 43	MEOCS 44	MEOCS 45
MEOCS 38	.225								
MEOCS 39	.119	.457							
MEOCS 40	.147	.402	.435						
MEOCS 41	.128	.393	.503	.402					
MEOCS 42	.126	.367	.393	.729	.405				
MEOCS 43.	.145	.437	.507	.398	.571	.415			
MEOCS 44	.309	.580	.428	.424	.393	.409	.463		
MEOCS 45	.105	.350	.393	.345	.378	.335	.414	.377	
MEOCS 46	.146	.428	.471	.405	.442	.391	.497	.455	.489
MEOCS 47	.129	.403	.475	.385	.452	.376	.510	.410	.524
MEOCS 48	.154	.449	.555	.411	.505	.395	.515	.465	.456
MEOCS 49	.083	.340	.445	.419	.428	.413	.417	.356	.432
MEOCS 50	.412	.188	.106	.121	.114	.096	.113	.207	.089
COM 51	.120	.060	.046	.098	.024	.087	.031	.090	.045
COM 52	.250	.182	.141	.223	.124	.209	.135	.224	.153
COM 53	.271	.212	.158	.209	.156	.184	.156	.253	.165
COM 54	-.032	.026	.031	.040	.015	.039	.032	.029	.047
COM 55	.162	.192	.151	.196	.145	.178	.151	.218	.166
COM 56	.209	.143	.129	.188	.120	.178	.124	.177	.153
COM 57	.066	.105	.097	.132	.091	.124	.093	.110	.117
COM 58	.221	.166	.123	.177	.118	.158	.118	.201	.134
COM 59	.105	.128	.102	.163	.102	.152	.100	.150	.136
COM 60	.125	.162	.153	.225	.125	.219	.143	.191	.181
COM 61	.167	.116	.095	.161	.083	.147	.090	.152	.109
COM 62	.189	.210	.157	.221	.161	.201	.155	.245	.167
EFF 63	.184	.146	.126	.146	.135	.139	.128	.152	.113
EFF 64	.212	.167	.143	.163	.154	.149	.143	.177	.124
EFF 65	.237	.191	.147	.191	.158	.176	.149	.210	.131
EFF 66	.189	.151	.132	.186	.134	.177	.129	.170	.129
EFF 67	.213	.165	.138	.154	.148	.143	.142	.179	.119
SAT 68	.185	.134	.127	.170	.142	.162	.126	.146	.140
SAT 69	.160	.109	.103	.126	.117	.117	.108	.119	.107
SAT 70	.185	.118	.106	.105	.120	.096	.115	.130	.114
SAT 71	.167	.109	.101	.105	.097	.101	.107	.125	.135
SAT 72	.167	.113	.099	.138	.110	.133	.096	.127	.125
SAT 73	.204	.151	.132	.188	.135	.175	.131	.176	.143

Correlations between MEOCS Items (continued)

Item	MEOCS 37	MEOCS 38	MEOCS 39	MEOCS 40	MEOCS 41	MEOCS 42	MEOCS 43	MEOCS 44	MEOCS 45
RAPS 74	.095	.110	.107	.137	.129	.132	.113	.100	.160
RAPS 75	.303	.417	.270	.267	.242	.248	.278	.502	.182
RAPS 74	.095	.110	.107	.137	.129	.132	.113	.100	.160
RAPS 75	.303	.417	.270	.267	.242	.248	.278	.502	.182
RAPS 76	.298	.424	.305	.316	.274	.297	.315	.478	.235
RAPS 77	.315	.445	.296	.301	.277	.280	.310	.505	.211
RAPS 78	.114	.020	.016	.036	.023	.038	.023	.014	.041
RAPS 79	.288	.221	.171	.226	.147	.212	.168	.265	.177
RAPS 80	.196	.234	.188	.211	.221	.194	.208	.239	.205
RAPS 81	.225	.349	.313	.376	.290	.365	.314	.391	.234
RAPS 82	.152	.195	.172	.244	.195	.235	.181	.196	.247
RAPS 83	.198	.110	.072	.144	.061	.137	.075	.131	.090
RAPS 84	.233	.378	.284	.242	.264	.230	.295	.408	.153
RAPS 85	.250	.388	.292	.334	.278	.319	.308	.436	.217
RAPS 86	.242	.388	.331	.329	.307	.314	.335	.426	.219
RAPS 87	.208	.269	.220	.264	.257	.245	.243	.276	.244
RAPS 88	.206	.269	.222	.248	.256	.232	.246	.275	.229
RAPS 89	.230	.355	.315	.303	.292	.293	.326	.392	.208
RAPS 90	.312	.455	.312	.308	.291	.288	.328	.530	.212
RAPS 91	.050	.095	.158	.167	.151	.169	.167	.089	.323
RAPS 92	.175	.213	.204	.238	.230	.227	.225	.209	.262
RAPS 93	-.042	.009	.099	.162	.102	.171	.097	-.001	.250
RAPS 94	.124	.177	.150	.200	.185	.192	.152	.181	.192
RAPS 95	.288	.233	.136	.138	.126	.127	.147	.254	.048
RAPS 96	.120	.126	.154	.205	.169	.196	.158	.115	.322
RAPS 97	.076	-.034	-.026	-.056	.005	-.055	-.013	-.048	-.012
RAPS 98	.274	.328	.244	.314	.225	.286	.247	.370	.282
RAPS 99	.078	.154	.153	.193	.154	.190	.159	.163	.201
RAPS 100	.073	.120	.173	.259	.177	.253	.173	.116	.273

Item	MEOCS 46	MEOCS 47	MEOCS 48	MEOCS 49	MEOCS 50	COM 51	COM 52	COM 53	COM 54
MEOCS 47	.562								
MEOCS 48	.517	.577							
MEOCS 49	.441	.477	.527						
MEOCS 50	.119	.112	.113	.059					
COM 51	.043	.035	.050	.067	.114				
COM 52	.156	.138	.159	.159	.233	.484			
COM 53	.174	.149	.172	.153	.268	.423	.632		
COM 54	.036	.035	.031	.044	-.043	.062	.032	.018	
COM 55	.168	.152	.166	.153	.146	.223	.348	.412	.136
COM 56	.144	.129	.140	.147	.195	.405	.553	.583	.048
COM 57	.112	.106	.108	.114	.061	.188	.213	.213	.176
COM 58	.139	.115	.133	.126	.222	.406	.530	.636	.067
COM 59	.119	.107	.118	.129	.080	.290	.326	.344	.162
COM 60	.165	.159	.167	.186	.083	.251	.369	.302	.147
COM 61	.109	.092	.106	.113	.159	.429	.506	.545	.080
COM 62	.175	.154	.178	.164	.171	.315	.421	.521	.090
EFF 63	.138	.125	.137	.106	.207	.118	.238	.293	-.068
EFF 64	.152	.137	.155	.122	.233	.131	.267	.330	-.069
EFF 65	.164	.141	.165	.130	.252	.152	.297	.348	-.066
EFF 66	.146	.126	.144	.136	.197	.195	.318	.338	-.031
EFF 67	.151	.131	.152	.111	.231	.142	.271	.331	-.059
SAT 68	.140	.134	.146	.130	.199	.207	.333	.373	-.059
SAT 69	.121	.108	.114	.102	.173	.143	.252	.280	-.044
SAT 70	.123	.117	.121	.088	.197	.163	.280	.355	-.048
SAT 71	.116	.122	.120	.096	.160	.151	.266	.302	-.007
SAT 72	.109	.111	.120	.112	.170	.236	.342	.375	-.036
SAT 73	.145	.136	.152	.144	.203	.323	.440	.489	-.030
RAPS 74	.126	.137	.122	.116	.108	-.016	.076	.102	.004
RAPS 75	.269	.241	.292	.203	.218	.079	.171	.186	.029
RAPS 76	.311	.289	.325	.259	.244	.102	.203	.206	.043
RAPS 77	.300	.271	.319	.226	.253	.077	.190	.211	.020
RAPS 78	.018	.029	.029	.009	.130	.093	.155	.156	-.038
RAPS 79	.184	.171	.193	.170	.239	.229	.392	.370	.006

Correlations between MEOCS Items (continued)

Item	MEOCS 46	MEOCS 47	MEOCS 48	MEOCS 49	MEOCS 50	COM 51	COM 52	COM 53	COM 54
RAPS 80	.212	.216	.216	.171	.245	.008	.116	.178	-.013
RAPS 81	.309	.292	.324	.312	.203	.105	.199	.188	.045
RAPS 82	.205	.215	.201	.218	.182	.033	.152	.169	.015
RAPS 83	.082	.076	.090	.078	.186	.167	.271	.247	-.010
RAPS 84	.267	.242	.299	.219	.179	.070	.143	.145	.035
RAPS 85	.298	.281	.313	.266	.215	.094	.192	.184	.041
RAPS 86	.326	.297	.341	.289	.207	.080	.190	.191	.039
RAPS 87	.251	.254	.255	.214	.247	.017	.154	.207	-.010
RAPS 88	.252	.251	.255	.206	.230	.017	.141	.194	-.014
RAPS 89	.305	.282	.328	.278	.186	.082	.173	.163	.041
RAPS 90	.315	.282	.336	.244	.242	.084	.201	.218	.031
RAPS 91	.196	.230	.184	.211	.046	.037	.096	.091	.073
RAPS 92	.239	.251	.238	.211	.200	.011	.142	.178	.005
RAPS 93	.138	.163	.110	.187	-.017	.027	.071	.044	.071
RAPS 94	.178	.185	.184	.214	.148	.029	.115	.140	.003
RAPS 95	.127	.104	.151	.073	.275	.152	.282	.313	-.027
RAPS 96	.216	.227	.181	.220	.122	.035	.141	.156	.031
RAPS 97	-.025	-.017	-.022	-.040	.106	.024	.055	.100	-.055
RAPS 98	.272	.263	.274	.243	.234	.121	.254	.271	.048
RAPS 99	.177	.179	.168	.179	.091	.017	.086	.079	.037
RAPS 100	.213	.217	.193	.228	.097	.056	.166	.152	.051

Item	COM 55	COM 56	COM 57	COM 58	COM 59	COM 60	COM 61	COM 62	EFF 63
COM 56	.331								
COM 57	.300	.208							
COM 58	.362	.579	.203						
COM 59	.355	.344	.329	.329					
COM 60	.321	.335	.278	.284	.404				
COM 61	.312	.530	.211	.560	.347	.288			
COM 62	.444	.434	.290	.498	.441	.374	.441		
EFF 63	.146	.278	.066	.266	.092	.063	.229	.167	
EFF 64	.172	.300	.075	.296	.109	.088	.243	.202	.701
EFF 65	.185	.301	.076	.314	.120	.112	.254	.233	.528
EFF 66	.186	.342	.098	.324	.157	.154	.296	.228	.490
EFF 67	.171	.295	.070	.312	.105	.079	.254	.212	.571
SAT 68	.210	.365	.123	.346	.183	.153	.323	.269	.358
SAT 69	.148	.271	.086	.262	.116	.101	.235	.185	.315
SAT 70	.187	.311	.103	.312	.148	.104	.291	.238	.298
SAT 71	.169	.293	.105	.284	.161	.141	.269	.216	.229
SAT 72	.218	.389	.152	.363	.251	.199	.350	.303	.275
SAT 73	.303	.484	.214	.474	.305	.260	.447	.413	.339
RAPS 74	.121	.070	.081	.070	.104	.107	.030	.151	.092
RAPS 75	.184	.124	.092	.142	.133	.165	.108	.209	.112
RAPS 76	.200	.159	.115	.165	.155	.207	.135	.226	.129
RAPS 77	.198	.140	.102	.164	.138	.171	.116	.231	.146
RAPS 78	.067	.153	.027	.151	.044	.039	.133	.076	.136
RAPS 79	.224	.346	.126	.326	.195	.250	.324	.264	.207
RAPS 80	.171	.107	.087	.126	.110	.098	.067	.210	.166
RAPS 81	.185	.164	.114	.151	.160	.214	.140	.210	.119
RAPS 82	.172	.131	.111	.130	.141	.157	.092	.202	.143
RAPS 83	.140	.225	.067	.219	.121	.147	.214	.164	.145
RAPS 84	.147	.104	.084	.110	.115	.146	.091	.162	.090
RAPS 85	.181	.139	.105	.146	.140	.189	.122	.200	.113
RAPS 86	.182	.143	.110	.149	.136	.182	.123	.198	.127
RAPS 87	.190	.133	.101	.155	.118	.117	.095	.223	.192
RAPS 88	.183	.123	.095	.143	.109	.109	.086	.213	.184
RAPS 89	.161	.132	.097	.124	.135	.188	.105	.181	.099
RAPS 90	.194	.147	.102	.170	.136	.176	.128	.217	.138
RAPS 91	.110	.123	.098	.079	.125	.160	.092	.109	.044
RAPS 92	.171	.128	.103	.133	.122	.134	.085	.198	.163
RAPS 93	.082	.096	.097	.047	.119	.158	.072	.080	.022
RAPS 94	.146	.100	.094	.110	.110	.114	.077	.168	.125
RAPS 95	.174	.248	.075	.273	.149	.129	.230	.223	.201
RAPS 96	.161	.153	.127	.127	.146	.170	.102	.181	.121

Correlations between MEOCS Items (continued)

Item	COM 55	COM 56	COM 57	COM 58	COM 59	COM 60	COM 61	COM 62	EFF 63
RAPS 97	.011	.071	-.026	.086	-.011	-.063	.060	.019	.108
RAPS 98	.242	.229	.151	.231	.205	.247	.180	.284	.140
RAPS 99	.110	.072	.092	.062	.099	.128	.054	.109	.077
RAPS 100	.158	.159	.137	.132	.163	.205	.126	.178	.102

Item	EFF 64	EFF 65	EFF 66	EFF 67	SAT 68	SAT 69	SAT 70	SAT 71	SAT 72
EFF 65	.597								
EFF 66	.535	.583							
EFF 67	.603	.604	.595						
SAT 68	.373	.361	.367	.396					
SAT 69	.339	.330	.325	.361	.434				
SAT 70	.326	.301	.283	.321	.417	.383			
SAT 71	.248	.237	.242	.248	.318	.282	.399		
SAT 72	.293	.282	.307	.283	.410	.304	.398	.435	
SAT 73	.368	.362	.376	.364	.486	.376	.433	.422	.583
RAPS 74	.111	.116	.074	.099	.116	.096	.100	.072	.068
RAPS 75	.136	.160	.117	.137	.095	.080	.101	.089	.081
RAPS 76	.154	.176	.146	.152	.113	.100	.113	.114	.113
RAPS 77	.174	.201	.146	.173	.124	.106	.122	.103	.100
RAPS 78	.140	.148	.132	.148	.182	.132	.160	.142	.155
RAPS 79	.233	.264	.268	.237	.266	.212	.234	.261	.275
RAPS 80	.195	.202	.131	.184	.174	.145	.168	.106	.110
RAPS 81	.140	.158	.149	.135	.125	.099	.094	.093	.111
RAPS 82	.163	.180	.142	.154	.167	.136	.134	.104	.120
RAPS 83	.158	.189	.182	.169	.186	.146	.159	.163	.181
RAPS 84	.106	.123	.099	.109	.074	.065	.077	.073	.075
RAPS 85	.129	.159	.131	.131	.100	.083	.084	.080	.086
RAPS 86	.148	.169	.142	.148	.115	.100	.102	.095	.099
RAPS 87	.218	.236	.165	.211	.201	.165	.180	.120	.130
RAPS 88	.209	.226	.157	.206	.191	.162	.177	.120	.123
RAPS 89	.120	.139	.125	.120	.095	.083	.081	.083	.091
RAPS 90	.161	.191	.147	.166	.117	.103	.114	.108	.101
RAPS 91	.049	.038	.074	.038	.081	.069	.072	.115	.105
RAPS 92	.186	.198	.150	.177	.176	.151	.160	.123	.125
RAPS 93	.022	.013	.062	.009	.065	.055	.034	.064	.078
RAPS 94	.144	.155	.120	.134	.142	.119	.124	.087	.118
RAPS 95	.225	.251	.211	.232	.223	.181	.213	.198	.231
RAPS 96	.135	.138	.131	.123	.160	.137	.137	.130	.136
RAPS 97	.115	.107	.077	.120	.130	.112	.137	.091	.090
RAPS 98	.171	.198	.174	.164	.167	.139	.148	.170	.177
RAPS 99	.085	.093	.086	.078	.081	.072	.062	.051	.058
RAPS 100	.111	.128	.138	.105	.151	.124	.101	.105	.128

Item	SAT 73	RAPS 74	RAPS 75	RAPS 76	RAPS 77	RAPS 78	RAPS 79	RAPS 80	RAPS 81
RAPS 74	.077								
RAPS 75	.114	.150							
RAPS 76	.152	.153	.628						
RAPS 77	.152	.151	.632	.661					
RAPS 78	.166	.092	-.024	-.033	-.041				
RAPS 79	.333	.082	.223	.247	.233	.226			
RAPS 80	.148	.297	.239	.264	.285	.083	.116		
RAPS 81	.150	.129	.419	.490	.438	-.000	.217	.327	
RAPS 82	.152	.358	.180	.229	.226	.095	.156	.414	.311
RAPS 83	.218	.100	.103	.123	.116	.251	.353	.107	.116
RAPS 84	.102	.057	.475	.485	.484	-.030	.201	.209	.440
RAPS 85	.130	.096	.481	.523	.506	-.014	.225	.260	.527
RAPS 86	.140	.096	.449	.495	.482	-.010	.234	.244	.487
RAPS 87	.173	.312	.260	.293	.318	.097	.161	.527	.318
RAPS 88	.166	.281	.260	.294	.313	.084	.155	.482	.306
RAPS 89	.122	.092	.421	.478	.448	-.016	.210	.238	.499
RAPS 90	.145	.092	.570	.556	.588	-.006	.259	.265	.473
RAPS 91	.095	.177	.059	.126	.072	.036	.129	.159	.178
RAPS 92	.158	.315	.178	.235	.231	.098	.157	.419	.274

Correlations between MEOCS Items (continued)

Item	SAT 73	RAPS 74	RAPS 75	RAPS 76	RAPS 77	RAPS 78	RAPS 79	RAPS 80	RAPS 81
RAPS 93	.070	.186	-.045	.026	-.035	.021	.055	.111	.124
RAPS 94	.132	.228	.166	.199	.202	.039	.110	.316	.215
RAPS 95	.255	.069	.247	.239	.270	.157	.310	.146	.182
RAPS 96	.154	.271	.082	.142	.118	.070	.155	.288	.180
RAPS 97	.095	.089	-.064	-.071	-.049	.175	.068	.137	-.063
RAPS 98	.220	.173	.345	.392	.378	.050	.294	.293	.361
RAPS 99	.076	.175	.160	.206	.185	.011	.094	.203	.228
RAPS 100	.155	.248	.065	.131	.099	.067	.157	.238	.220

Item	RAPS 82	RAPS 83	RAPS 84	RAPS 85	RAPS 86	RAPS 87	RAPS 88	RAPS 89	RAPS 90
RAPS 83	.133								
RAPS 84	.155	.047							
RAPS 85	.239	.099	.533						
RAPS 86	.216	.102	.527	.580					
RAPS 87	.453	.126	.238	.335	.340				
RAPS 88	.404	.109	.241	.306	.322	.615			
RAPS 89	.210	.101	.489	.518	.563	.305	.336		
RAPS 90	.213	.115	.548	.561	.561	.326	.344	.577	
RAPS 91	.253	.069	.081	.131	.135	.200	.185	.175	.127
RAPS 92	.445	.125	.166	.249	.240	.502	.488	.252	.256
RAPS 93	.254	.039	-.033	.060	.045	.156	.134	.077	-.018
RAPS 94	.340	.072	.148	.205	.212	.370	.397	.204	.209
RAPS 95	.100	.246	.244	.211	.229	.158	.160	.200	.283
RAPS 96	.360	.098	.049	.137	.134	.339	.320	.132	.120
RAPS 97	.089	.127	-.072	-.084	-.070	.125	.113	-.077	-.066
RAPS 98	.273	.165	.305	.360	.353	.332	.330	.335	.398
RAPS 99	.258	.056	.165	.225	.208	.253	.237	.212	.203
RAPS 100	.336	.123	.066	.162	.154	.298	.277	.173	.112

Item	RAPS 91	RAPS 92	RAPS 93	RAPS 94	RAPS 95	RAPS 96	RAPS 97	RAPS 98	RAPS 99
RAPS 92	.344								
RAPS 93	.477	.310							
RAPS 94	.191	.388	.213						
RAPS 95	-.052	.112	-.144	.076					
RAPS 96	.411	.419	.409	.318	-.021				
RAPS 97	-.004	.105	-.031	.056	.163	.019			
RAPS 98	.217	.308	.134	.240	.194	.309	-.064		
RAPS 99	.257	.302	.283	.221	.015	.288	-.059	.249	
RAPS 100	.385	.409	.443	.265	.008	.459	-.002	.303	.400